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Correspondence from practical farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the writer may wish. The PLOUGHMAN offers great advantages to advertisers. Its circulation is large and among the most active and intelligent portions of the community. Entered as second-class mail matter.

High Wages and Small Savings.

What becomes of the city man's wages? Farmers read with surprise how workmen in New York city getting three, four and even five dollars for eight hours work are walking the streets in idleness because some walking delegate has commanded a strike. In the face of big pay and short hours there is evidently discontent with conditions which appear almost like wealth and ease to the average farmer.

Yet few of the highly paid city workmen get ahead in the world. Most of them live in rented houses, sometimes in the slum districts, amid dirt, ugliness and overcrowding. Why do they not acquire good homes and a competence? In the first place, a great city is the most expensive place in the world in which to live and support a family. Two dollars there goes no farther than one dollar in a country town for paying cost of rent, food, suitable clothing and other necessities.

The cost of amusement is even higher in proportion. The farmer who plans a day of enjoyment can hitch up the horse and drive to the shore with his family, or get up a picnic, or go fishing or hunting, and can easily arrange for no end of wholesome pleasure with hardly a cent of extra expense. But the city man must pay heavily for every item of enjoyment, from car fares to holiday clothes for his family. There are temptations to spend money at almost every step of the way, and a little outing makes a big hole in the pay envelope. The saloon keeps getting more than they ought of the money. The scarcity of natural pleasures tempts to loafing, smoking and drinking in the saloons, which are crowded nightly with the working classes.

Moreover, the pay is not so very large when reckoned on a long average. Trades like masonry, brick-laying, stone-working, which command high daily wages, are mostly trades in which employment is uncertain, being interrupted by cold weather or storms and lack of work during periods of dullness in the business world. Some of the highly paid work is very disagreeable, severe or unhealthy, and shortens the working life of the artisan and undermines his health.

Now and then during a period of prosperity and freedom from strikes and other causes of idleness some of the more thrifty workers may lay aside a little money. But here is another difference compared with the farmer. Country life educates in caution, good judgment, economy and other virtues tending to thrift. The farmer invests his savings in more land, farm improvements or the local bank. The city worker is an easy victim of the hundreds of wild mining ventures or similar schemes of which he reads in his Sunday paper, and he finds his savings even more uncertain than his employment.

Occasionally a workman has the courage to break away from his surroundings and to move out where he has a possible chance to save money enough for a home amid wholesome conditions. But even then his state lacks the substance and independence of the successful farmer. His suburban house, when paid for, costs as much as a farm, but, unlike the farm, is not a source of income or resource against loss of employment or approach of old age.

The city workman sometimes thinks of considerations like these. Two out of three of them have plans for retirement to a farm at some future period, which usually never arrives. But who ever heard of a farmer planning to become a city workman? The advantages of a change are nearly all in the other direction.

Honey and Honey Dew.

Nothing has injured the honey business so much as the marketing of "honey dew" honey, under the name of "buckwheat," by ignorant or unscrupulous parties. We have seen it by the carload in Springfield and Boston markets, and told the merchants to whom it was consigned that we would be willing to wager there was not an ounce of "buckwheat" about it, and before we finished our demonstration, they learned a few new points about honey. This "honey dew" is a sweetened exuded by tiny insects on the leaves of trees, in our locality, principally elms, and the bees work on it mornings until the sun dries off the leaves. Some years there is none, and some years it has seemed as if there was not much else. It is a particularly aggravating case when they will rather just enough of the wretched stuff to put a few cells in each section of nice, white honey and thereby spoil the sale of it, as happened to some two tons of our honey one season. Bees die in trying to winter on this honey dew, and when parties buy a box of so-called "buckwheat honey"

and are quite likely sicken by it, they very naturally conclude they want no more, although the real buckwheat is palatable and all right.

When we are so unfortunate as to have the honey dew in the hives in the fall—and that gather! from pines is particularly rank and destructive—we have to extract it and feed sugar in its place. This extracted stuff may be used to feed in the spring to stimulate brood rearing, after the weather will permit the bees to fly freely, but not late enough to risk getting any of it in the sections. Doubtless much of this kind of honey finds its way to brewers, etc. We have heard that it can be made up into very good fruit preserves. We think quite likely if we knew all about the ingredients of many other articles of diet we might, perhaps, lose our relish for them.

Among the Farmers.

I apply all fertilizers to orchard in the fall six months from fruiting season. The object is to have the late autumn rains wash the plant food down, so as to keep the roots as far as possible below the surface and out of the reach of the plow and cultivator.—H. C. Snavely, Lebanon, Pa.

In visiting different poultry sections I find the reputation not always a guide to the actual state of affairs. Thus in southern New Hampshire and southeastern Maine I was surprised to find a region of large poultry farms, although up to a few years ago the section had scarcely been mentioned in this connection. Again, in Woburn and Montvale, Mass., I found the business far more thorough going, extensive and instructive than I had been led to suppose from what little I had read on the subject. I have not seen anywhere such success in maintaining health and vigor in crowded flocks. And the result is no accident, but comes from sound intelligence and knowledge of hen nature.—G. B. Fiske, Middlesex County, Mass.

The general farmer has usually a mixture of several breeds. He has now and then a good cow that crops out by chance, but the great majority are poor cows that pay little or no profit. When you find a herd of good cows, then you find a man that has put study and thought into his business, and has some definite plan in his work. He usually has one line of stock and sticks to it. Now we cannot all have full bloods, but a full-blood sire is within the reach of most any one, and when you have him and stick to the one line you can soon have a herd equal to any as far as butter production is concerned.—H. D. Griswold, West Salem, Wis.

The talk of "too much old blood" in the board of agriculture may not apply to those oldest in years. One man may be older at thirty-five than another at seventy.—B. W. Potter, Worcester County, Mass.

It is the fault of the farmers themselves that the boys and girls do not stay at home. Parents do not instill in their children a belief in the high nature of the calling. The Grange has made a great change in this matter. It has taught the young people that they can dress just as well on the farm as in the city and be just as well educated.—C. D. Richardson, Worcester County, Mass.

The horse I consider all right, the cow is all right, the hog is all right, the sheep is all right, but the mule I consider by far the best of all.—L. H. Monsees, Smithfield, Mo. Farmers do not fully realize the value of successful agricultural experiments. I have realized more benefit from Professor Brooks' experiments at Amherst than ten times my past of the cost of a taxpayer of supporting the college and experiment station.—G. H. Ellis, Middlesex County, Mass.

Farm Fish Culture.

Many persons have ponds or available streams that could be profitably utilized if the owners but knew how. Life is far more abundant in water than in the same area on land, and this means that the water can be made to yield fully as much for man's use as can the soil. "The waters should feed the land," is an old saying that may justly claim a literal significance. In some parts of Europe ponds and lakes are renting at the same rate per equal area as the best land adjoining them. This is for the fish they are made to yield. Although State and national fish commissions are doing all in their power to maintain the number of our fishes useful to mankind, it must be acknowledged that they are playing at a losing game, owing to (1) a lack of the complete and detailed knowledge as to what is best to do and how to do it; (2) the constantly increasing destructive effects of the so-called "march of civilization," and (3) the lack of adequate State and Federal support for placing this very important industry upon its proper scientific basis.

Truly has one of America's greatest living scientists, Prof. S. A. Forbes, State zoologist of Illinois, said in one of his recent reports: "In regard to fish culture we stand today at a point to be compared with the American Indian's knowledge of agriculture at the time of the discovery of America by Columbus." However, we can live up to the best light and knowledge we have, and by so doing hope to obtain more. Just as the Indians could use their crude knowledge of agriculture by clearing the ground, sharpening stones and sticks, and pulling some of the larger weeds, thus causing the maize to increase in abundance above what it would be without this effort, so can we use our crude knowledge of fish culture to make the water more productive by observing some of the following suggestions advanced through the New York Tribune by Prof. H. A. Surface of the Pennsylvania State College:

Put the pond or stream into proper condition, not only by cleaning everything out of it, and making it a proper depth, but by making a variation of conditions so the fishes can select sites to suit themselves. One part should be as deep as possible, another should be shallow and quiet and contain growing aquatic vegetation of many varieties of plants as possible, while in the more rapid parts of current there should be sand and gravel. The water should be kept as cool as possible in summer, both by shade trees growing along the banks and by artificial floats to afford shade and concealment. Grass and weeds should be permitted to overhang the waters to yield some insects to vary the diet of the fishes and give them additional protection. Enemies of fishes should be reduced. These are other voracious fishes, water snakes, muskrats, herons, ospreys or fish hawks, kingfishers, sometimes owls, minks and raccoons.

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using 3x6 lumber for girders, put in flatwise so as to be even with the sill and plate. Double board both inside and out with boards running up and down, taking pains to break joints well so as to have it tight. Let the inside boarding run from the top of the plate clear to the ground. Set it where there will be no surface water, or grade up first so as to turn the water all away, unless the underpinning is pointed up the bank clear to the sills. To keep the air out, have the door in one end where the sun will strike it as little as possible.

A tight-fitting door on the outside and short boards cut to fit inside to be put in as the house is filled. Put a window in each side for the hot air to pass out and to keep the roof cool. For a floor lay sticks on the ground to lay plank on. The sticks will hold them up a couple of inches to let the water soak away. Put on six inches of sawdust, where that is used, and the same

and are bringing 75 cents to \$1 per bushel. Many small growers pack in odd-size boxes greatly to the annoyance of dealers. Better pack in barrels than in odd boxes. There are a few fancy pears on the market, with sales reported as high as \$2.50 per bushel in jobbing lots. These are large, strictly uniform, high colored and perfect. Receipts as yet are mostly Clapp's Favorite, native Bartlett not yet arriving to any great extent.

Apples are in ample supply at New York and demand is good for the higher grades. There is much poor stock and windfalls for which prices are low. Pears are in good demand and prices hold well, especially for New York and New Jersey Bartletts. Peaches are fairly plenty. The best are from Michigan and New York at present. Many were picked very green and do not ripen well.

Grapes are in good supply, with prices working down. Plums are in quite large accumulation and dragging. Huckleberries are slow sale, except choicest Mountain berries, which hold steady. U-river blackberries in light receipt and selling at ten to twelve cents per quart. Muskmelons are heavy supply, and nearly everything lacks quality, and prices are low and irregular; strictly fancy would command a premium if here; many are so poor that they are not accepted by receivers from transportation companies. Watermelons are in fair supply, but small and poor, and working out slowly at low figures; fancy large melons would command more than quoted.

New Ideas for Silos.

The success of a round water tank of concrete moulded on a framework of wire fencing led to the idea that such a structure built longer and a little larger would make a good and cheap silo. The plan was submitted to the Wisconsin Experiment Station, where the investigation of silo problems has been so extensive as to make it authority in this line. Reply was received as follows:

SUCCESS WITH CONCRETE.

It seems to me it would be perfectly feasible to construct a cylindrical silo of concrete with stout wire fencing embedded as you suggest. I inspected two silos a few days since built on the Morgan Farm at Beloit, Wis., of concrete with a cement plaster lining, but having three-eighth-inch rods laid in sections around the silo at distances varying from two feet apart near the bottom to five feet apart near the top. These silos have both been filled and emptied so that there can be no question regarding the strength. One was twenty-four feet in diameter and the other thirty feet.

The concrete silo is a thoroughly practical and permanent structure and meets with only one objection, so far as I can see, namely, that it is a better conductor of heat than wood and therefore does not protect from freezing so well as does a wooden silo. There is also a tendency to collect some moisture in the walls on warm days in the spring, but this is not an inconvenience, and in the two cases mentioned did not injure the silage in the least.

The action of the acid of the silage on the cement I believe to have been overestimated. I have seen cement-lined silos which have been filled eight years, and the cement lining was as good as new. Material, a thin cement wash every three years being sufficient to keep it in good repair.—A. R. Whitson.

THE MATERIAL.

King gives the ratio of ingredients for making concrete as follows: To make one cubic yard of concrete use twenty-seven cubic feet of crushed rock, 13.5 cubic feet of gravel or screenings, 6.75 cubic feet of coarse sand, 3.375 cubic feet of Portland cement. The crushed rock may not be an absolute necessity, as concrete silos have been built by using gravel and sand only with the cement, but only the best Portland cement should be used. The crushed rock, gravel and sand should be thoroughly moistened before adding the cement, then add the cement and mix thoroughly, adding enough water to make a rather thin mortar. The sand tends to make the concrete crumbly and must be very coarse. It is much better to run it all through a screen, sifting out the dirt and fine particles.

Wire fencing has often been used to bind and lighten a stave silo. Its strength is ample for that purpose, and also as a skeleton for a concrete water tank. The writer has not yet tested it for a silo, and for the first trial, owing to the height of the usual structure and the great pressure near the bottom, he would, perhaps, strengthen the wire with a few heavy iron hoops bedded in the concrete. For those who wish to try the plan I will give the method used for the water tank:

STARTING THE STRUCTURE.

First take an iron pipe, say two inches in diameter, and embed it in a block of concrete in centre of site, projecting about one foot more than the height of proposed tank. This serves as a centre post round which to make the tank. The walls of this tank, six feet deep, are composed of cement and fine gravel cleaned washed to pass through mesh of four hundred per square inch, with the fencing embedded in centre, or rather more to the outside than the inner side, and the sides are only three inches thick at the bottom and 2½ inches at the top.

It is necessary to have a mould to pour the concrete into, and this is formed of a convex segment of a circle inside, say, one-third of a fifteen-foot diameter tank and a concave segment to go outside, bolted together with four or five bolts temporarily, and distance pieces the required thickness of the tank here and there. The inside segmental mould can swing round the central post, and is kept at proper distance by radius rods, but can be withdrawn slightly inward so as to move without disturbing the concrete already made. The site being

level, spread on it one inch deep of gravel without cement and smooth it flat.

Then set up a part of the wire frame. It can be put up in convenient sections, four feet in height at a time, concreting nearly to the top of the section and then putting on another section overlapping a mesh or two for binding.

The sections may be also laid in overlapping segments for convenience in getting inside while at work. Begin at the centre and put on three inches of concrete, using three parts gravel to one cement. Cover bottom nearly to the sides until you get a circle about one foot less in diameter than the inside of tank will be. Quick setting cement should always be used.

SOLID WALLS.

This done, proceed with the sides. Put inside mould in place and wedge up. Set up the outside mould with distance pieces and bolt in place, the fencing being between the two moulds.

Mix the concrete well as directed and pour in, ramming down with iron rod so as to get rid of hollow places and bubbles. Let the sides of the concrete find its own angle. This must be allowed to set properly; a night should do it. Next day shift the mould round and do the same thing, adding a sheet of fencing as wanted, always letting one overlap the other by a mesh or two to bind it. Do this till you have come round to the first moulded piece; there will then be a complete ring half-way up the expanded mesh. Lift up the moulds the required height, and put on another ring. As the mould is three feet six inches high, let it overlap six inches in the bottom ring while moulding the next one. Repeat until the required height has been obtained. Finish off smooth. When sides are finished fill in the small space between bottom and sides, besides having a kind of foot wall key well with the bottom; grout over with neat cement. G. B. F.

Middlesex County, Mass.

Grass on Moist Land.

There is much moist and heavy land that can be plowed well which is capable of bearing heavy crops of a fine quality of hay on many farms in Vermont, and I dare say elsewhere in New England. One of the methods of raising heavy grass, on either wet or dry land, is found in returning sod lands to grass at the earliest possible time after plowing that the soil can be well fitted for the purpose. Heavy soil plowed in July and August and fertilized with ten or fifteen two-horse loads of fine stable manure, spread evenly upon the inverted sod land, thoroughly harrowed and pulverized, made as fine as a flower bed, can be seeded to redtop as late as Sept. 15, with good results.

About six pounds of redtop to the acre sowed any time when the land is ready, with an addition of the same quantity of alsike clover, sowed in the early spring following the redtop sowing, will make quite a heavy stand at first cutting and will come to full blossom at the second cutting in September. Alsike clover will thrive on very wet soil, and the combination makes an excellent feed for all kinds of stock, while the quantity will be entirely satisfactory, as two crops a year for two successive years will be produced. Randolph, Vt. DANA H. MORSE.

Special Objects of Grange Effort.

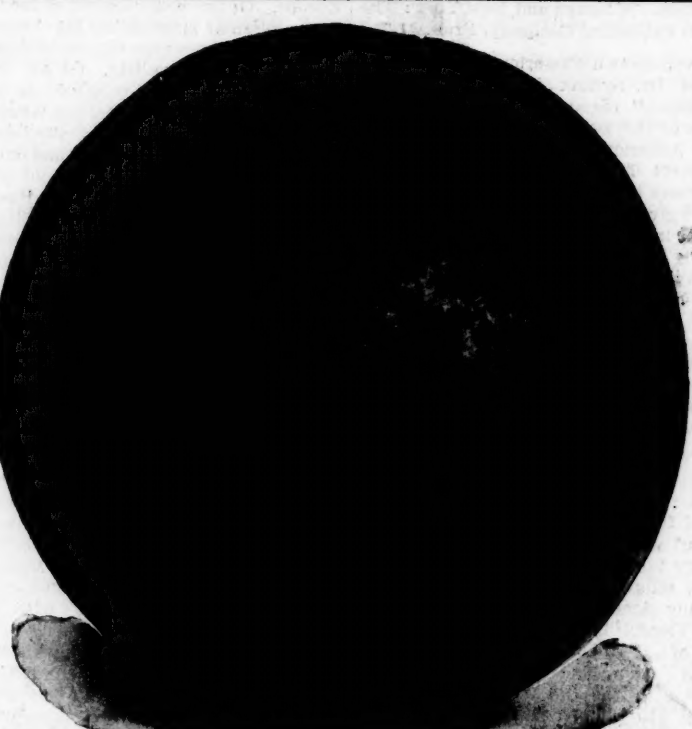
People representing other interests and industries have been looking after those interests, as it is their right and duty to do, while we have been neglecting our own interests and helping them. We shall endeavor to secure rural free mail for the country people, as has already been done for one-fifth of these people. We shall endeavor to secure better educational advantages for the boys and girls upon the farms for securing legislation that will improve the country schools. We shall endeavor to secure the just rights of agriculture in our land-grant colleges by making instruction in agriculture the leading feature, as it was intended by the farmers. We are in favor of the establishment of postal savings banks for the encouragement of habits of thrift and economy among the rising generation, and to furnish the Government with money directly from the people. We are in favor of the election of United States senators by direct vote of the people for any good reasons and with the possibility of securing to agriculture, at least, one direct representative in the upper branch of the national Congress which it doesn't have today.—Address of Gov. N. J. Batchelder of New Hampshire.

Good, Clean Garden Seeds.

In saving tomato seed, we take the tomatoes when they are thoroughly ripe and remove the seed pulp. This is placed in glass jars, covered with water, and set away. The object is to separate the seed from the pulp. An occasional stirring of the contents of the jar is beneficial. After two or three days pour off the liquid, leaving the seeds, and add fresh water. After this is repeated two or three times, or until the waste matter is removed, place the seeds on cloth until thoroughly dry, when they are put away until planting time. Cucumber and melon seed may be treated in the same way.

In saving beans or seeds of like kind, we always leave unpecked what we think we shall need for seed, thereby saving the best for seed. HENRY W. TAYLOR. Middlesex County, Mass.

Corn is best when the ears are quite well glazed. The plant nearly or quite doubles its food value in the last month of its life, and he who enables immature corn loses a large amount of potential food and makes an inferior silage.—Jos. L. Hills, director Vermont Experiment Station.



A FINE SPECIMEN OF A GRAVENSTEIN APPLE.

Ducks and geese should not be kept in waters intended to yield fish. They befoul the water, make it muddy, and destroy the organisms that would directly or indirectly become the food of fishes.

After the favorable and desired conditions are established, the food plants and small aquatic animals have been introduced, minnows added. If for fish-eating fish spawning sites, winter retreats and summer shade provided, then introduce the desired fishes suited to the waters.

Select the kinds of fishes suited to the water thus prepared. If this is not known, send full descriptions of the conditions to the United States Fish Commission, Washington, D. C., or to other experts, and receive the essential information, acting accordingly.

We know where this has been done in such a practical, sensible and scientific manner, with the most gratifying results.

Essex County (Mass.) Farm Notes.

Some of our crops have done well, but others have been total failures. The corn crop must be regarded as a comparative failure. This is true of both the early and late varieties. Beans have been very backward and uneven. The early snap beans have done well, but the shell varieties have been a failure. Cucumbers have come forward very slowly. Beets have done well and are of fine quality. Tomatoes are having a hard fight for life.

Potatoes are yielding well; the crop is more than an average and the quality never better. Small fruits have hardly been an average crop, but have maintained a high level from the first to the last picking. One of our most successful farmers has said to me that he should net more money, with less work, than he did last year, as the result of the high price of vegetables.

The hay crop has been a surprise. This is the most important crop in our county. With the increasing interest in dairying the fodder question comes to the top. On good rich soil the grass doubled in one month and did not stop then, so that the crop is now more than an average one, and is not all harvested yet, while on all the early mowed fields the promise for a large second crop is good.

When the outlook for the hay crop was so discouraging many of our more intelligent farmers turned their attention to other crops. Large fields of corn, millet and Hungarian were planted as late as Aug. 1, and all are doing well. As the result of such foresight our farmers have nothing to fear for the coming winter. Winter apples are of good quality and sell high.

O. S. BUTLER.

Essex County, Mass.

Another Farm Icehouse.

The first thing in building an icehouse is to have good drainage. Have it so there can be no circulation of air through the ice, as that melts it more than anything else. It is all right built out of common, rough lumber.

To furnish ice for a family and to run a refrigerator, etc., I should build about 10x12 feet and eight feet posted, putting up a regular frame out of six-inch lumber,

Better in Moderate Supply.

Such changes as have occurred are in the direction of higher prices, but the advance is only a small fraction and is the result of somewhat lighter receipts.

This is the time of year when the make would be expected to fall off somewhat, but the rains have kept up the pastures and the milk yield very well. There has been, however, some reduction apparent in shipments during the past week, resulting in an advance of one-fourth to one-half cent on best grades. Cholesterol is not in large supply, and extra fine lots are in many cases selling at about 20 quotations, bringing 21 cents. But the quotations given are those more generally prevailing. Lower grades have advanced but slightly or not at all, but are in quiet demand. Extra dairy is firm at the advance. Box and print butter of the best grades is a little higher and is selling well, but lower grades are unchanged.

Speculative buying is not active at this season and the market is governed by supply and demand. The speculators and storage men, in fact, have fully as much stock as they care for in view of the outlook. Much of it was put away at higher prices than now prevail, and their outlook for profit is not promising.

Chapin & Adams: Butter receipts are nearly steady, being still large for the season, and not much hope appears for better prices for the present. The abundant rains have made the feed good, and pastures are excellent for the time of year. The cheese market is barely steady. The same conditions apply as to the butter product, and there is no present indication of higher prices.

The New York market is a shade firmer this week, although slight changes occur in quotations. Receipts of 15,862 packages Wednesday show that the make is still large. A few transactions are reported at 20 cents, but 19 cents is the ruling figure for fancy creamery. There is still some uncertainty as to the course of the market for the next few days; at a little less price important business could probably be accomplished and many buyers are holding off, hoping to secure this advantage. There is no change in the quotations on the lower grades of creamery, but the feeling is rather easy. Imitation creamery is quiet, but steady. Fresh factory in fair demand and firm for nearly all grades; sales of best packings at 15 cents, with fair to good lots going at 14 to 15 cents. Packing stock is inquired for and brings a little more money; sales at 14 to 15 cents generally.

Cheese is in fairly liberal supply, with top quotations at New York 10 cents. Demand is slow. Stocks tend to accumulate, and further change would be downward unless supplies decrease. Large full cream cheese continues in comparatively small proportion in receipts, but demand from home dealers is moderate, while exporters claim little encouragement in their advices and showing very little interest. Skins continue plenty and accumulating and prices weaker.

A Union (N. Y.) cheese maker writes: "It is understood that buyers are encouraging their factories to ship cheese closer to the hoop than ever before—within four or five days in some instances. The buyers put it into cold storage and care for it there themselves. For this reason stock is sold off a week or ten days later than usual, and factories will have that much less to dispose of this fall. Factory men say that the late season in gathering the crop of hay will make after feed prices slim. This, in connection with the lack of fodder corn, is expected to decrease the flow of milk this fall very materially."

Hay Still Declining.

Latest reports fully confirm the previous estimates made through these columns. The crop is evidently a good one, taking the hay-producing sections as a whole. It may not be quite what would be called a full yield, but it is apparently better than the average of years, probably about four-fifths of a full crop. It will certainly prove larger than last season, and the price will naturally be lower.

The proportion of the best qualities will also be larger, and this fact will tend to limit the range of prices. Last year No. 1 and extra grades were very high, because most of them had been injured in the harvesting, and had to be graded low. Unquestionably there is a great deal of damaged hay this year, but the proportion of such stock, especially from the West, will be much smaller than last year. Estimates of the probable range of prices are at hand, as made by dealers in several large Eastern cities. They range from \$14 to \$18 for No. 1 baled hay, giving an average of \$16 for the estimates.

Grain Prices Irregular.

The future of corn depends on the weather of the next few weeks, warmth and absence of early frost being required. Under favorable conditions a yield of two thousand millions of bushels is generally expected. The crop West is far more promising than in most Eastern sections.

The wheat situation is pretty well assured. Nevertheless old wheat sold in Minneapolis at \$1.02 last week. The new crop is being held back to a considerable extent, the growers expecting better prices. On the other hand, many buyers are waiting in hope of lower prices in September. Much depends on the export demand, which at present is not large. On the whole, good, strong prices seem assured, but the prospect of advance depends on points which cannot yet be fully estimated.

Wheat exports of Boston are picking up somewhat. They have been suffering greatly from the competition of the Texas ports on the one side, and of Montreal and Portland on the other side.

Short Crop of Broom Corn.

G. B. Griffin, Illinois: The reason that so many of the Illinois farmers have gone out of the broom-corn business is first, that for the last two years it has been nearly impossible to get labor to care for the brush properly, and second, our farmers are reluctantly compelled to admit that they can not compete in price with the Oklahoma broom-corn farmers.

We have interviewed 219 farmers in nearly all parts of the broom-corn district of Illinois, and we find that the farmers which had 7567 acres under broom corn last year have only 3679 acres this year.

This proportion will hold good all over the State and indicates that the State of Illinois has slightly less than half the acreage of last year.

Of these 219 farmers who planted broom corn last year and seventy-seven planted none this year, and seventy-two others have planted less than last year, while twelve have planted more than last year, and fifty-eight planted about the same number of acres as last year. The season in Illinois has not been good.

The reduction of acreage in some of the

old districts of Oklahoma is as great as in Illinois, while in some other districts they have planted double as much as last year.

This being the case and broom corn being more or less scattered, almost all over this large territory we discovered we had a large contract on hand in getting at the acreage, yet we are certain that we are not far from the truth in asserting that the increase in broom-corn acreage in Oklahoma is between fifteen and twenty-five per cent. over last year. But it must be remembered that last year Oklahoma produced a bumper yield, while this season large districts in that country have been seriously injured by drought. Therefore, Oklahoma cannot be expected to produce much, if any, more than last year.

The official report of Kansas gives about twenty-five thousand acres where there was more than forty thousand acres last year, and as Kansas was also afflicted by floods early in the season and drought in July, we expect this State to produce not much more than half as much as last year. Missouri has reduced her acreage very decidedly and will not out much figure this year, and nearly all districts, except Oklahoma, have a reduced acreage.

We had a figure about right except that on account of the unusually heavy yield in Oklahoma we underestimated that country, and we are now certain that there were at least forty thousand tons of broom corn worked into brooms during the last year.

We estimate the supplies for the coming year as follows: Illinois seven thousand tons, Oklahoma fifteen thousand tons, Kansas five thousand tons, other States 1500 tons, carried over 1900 tons. Total supplies for year thirty thousand tons. This is at least ten thousand tons short of last year's consumption.

Scarcity in Codfish.

The reasons for the present shortage of codfish are somewhat uncertain. The numbers of most varieties of fish vary greatly from time to time very much as in the case of insects, and the precise causes may be hard to find. In this instance the trouble is said to be due principally to changes in the currents of the Atlantic Ocean, the cod being driven from their usual haunts by Arctic currents. The price of cod-liver oil, much of which comes from the Norwegian fishing grounds, has gone from \$22 to \$160 per barrel for raw material. The Norwegian fishermen claim that the deflected Arctic currents have killed the small crustaceans which constitute the oil-producing food of the codfish. At Boston the price of cod has reached the highest point touched since the civil war, and dealers are careful about parting with very large lots, as they look for even better (or worse) figures. At present the receipts are only about one-fourth of the regular supply, it is said, and there are small prospects of improvement in the situation.

Beans Promising Poorly.

The cold wet weather has been unfavorable to the bean crop, and the prospects in most sections of the country are reported unfavorable. The cold period during the time of blooming seems to have reduced the setting of pods to a serious extent.

Michigan growers report injury in some sections from light frost, which impaired growth without killing the vines. They also complain of loss by grubs and out-works. The crop in New York State, Wisconsin and Canada, although more promising than in Michigan, still shows a backward condition, with fewer pods than usual.

A prominent New York dealer says in regard to acreage, etc.: "The acreage originally planted in Michigan was probably eighty to eighty-five per cent. of last season's. New York State we believe to be full acreage. Canada and Wisconsin the same as last year. We haven't made personal investigation in Canada, New York State or Wisconsin, but from all the reports we get from those States they are in about the same critical condition as Michigan. There are, as is well known, very few old beans left back. Probably not ten per cent. of what were on hand last year Oct. 1. All these things being true, it would seem that the price of beans might advance to most any figure."

Cranberries a Fair Crop.

The cranberry-picking season on Cape Cod has begun. The season is about a week earlier than last year, and the berries are further developed, owing to the cool weather during the nights of the past week. In the cranberry-growing districts near White Island the picking season will be begun in earnest next week. The prices for berries this season promise to be about the equal of last year. Already the buyers are on the ground, offering \$5 per barrel, and a number of sales have been made. At Wareham the crop is large and prices, so far, good.

Literature.

In "The Man with the Camel Cloak" we have a story of the conspiracy of Aaron Burr, which is called "An old writing translated and edited by Carlen Bateson." The supposed narrator is Ezra Wilbur, a native of Massachusetts, and an early settler and inhabitant of the town of Marietta, O. Blennhasset's Island was about fourteen miles below this place, and Gen. James Wilkinson, commander of the army in the West, and other historical personages, figure in the tale, which has an atmosphere of reality, even though many of the incidents are purely imaginary. Fact and fiction are, however, so artfully mingled in this book that it is difficult to distinguish one from the other, and the love and devoted friendship are not absent from its pages. There is no apology for Burr here, and, indeed, General Wilkinson, as his friend, is not shown in an enviable light. Both men rested under a cloud of suspicion during their lives as disloyal subjects of the youthful republic who were desirous of forming a new empire in the Southwest, though Wilkinson held a commission in the War of 1812, and Burr was tried and exonerated. There is much to commend in this novel as a picture of a by-gone period. Its incidents are varied and exciting, and its principal characters are lifelike. (Chicago and New York: The Seaford Publishing Company. Price, \$1.50.)

IMPORTED GUERNSEY COW. ANTONINA.

Official year's record, 10,441.44 lbs. milk, 441.11 lbs. butter fat. Owned by Mr. H. McKay Twombly, Madison, N. J.

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The well-known humorous classic, "The Tour of Dr. Syntax in Search of the Picturesque," reappears in a new issue, founded on the seventh edition published by R. Ackermann eighty-six years ago. This poem has lost none of its sparkle in the years that have intervened since it was first given to the world, and its reappearance in its present dress will be welcomed by all lovers of good literature. Not its least attractive features are the thirty-one colored illustrations by Thomas Rowlandson, which make us so familiar with the face of the immortal parson and with the customs and manners in England in the early part of the last century. They are quite as amusing as the funny text. (New York: D. Appleton & Co. Price, \$1.25.)

A love story pure and simple is "Cirillo," and a charming one, too. It is a little idyl—a prose poem, that is enveloped in something of the light that never was on sea or land, but which impresses one as real, like the fairy tales we used to read in the long ago. It tells of the affection of a beautiful young American girl for a handsome young Florentine, a singer in the Italian opera; of a stern parent's refusal to consent to their union, and of her separation from him in the Old World, only to be reunited to him again in the new one. He comes to New York where he meets with great success on the lyric stage, and the lady still loving him, her father relents to prevent a scandal, because he knows his daughter would defy a second refusal. All this is related with delightful and picturesque simplicity by the author, Elsie Douglas Putnam, who finds a narrator in a portrait painter, who is, perhaps, one of those friends that are only found in fiction and in the Biblical story of David and Jonathan. We believe this is Miss Putnam's first book, and it is one that augurs well for her future success as a writer. (New York: Life Publishing Company. Price, \$1.25.)

Those who are at all familiar with Mr. G. K. Chesterton's writings looked forward with keen interest to his life of "Robert Browning," which has been added to the notable "English Men of Letters" series. It was anticipated that this clever Englishman would not follow in the footsteps of the other biographers in the series, and he has not disappointed those who expected a vivid sketch of this great Victorian poet. There is the spontaneity of youth in the life before us, and a cleverness of observation and opinion which has led the old school of literary critics to express their disapproval. Aside from the ever-interesting subject which he discusses, Mr. Chesterton is himself diverting, and it was no more possible for him to conform to the ancient type of biography than it was for him to do a grave injustice to Browning's reputation as a poet. As we read the book, we find expressed our own opinions to which one might take exception, but the facts of Browning's life are told so interestingly that the reader is destined to retain in his memory more information than he would from a biography written in a heavier style.

Mr. Chesterton tells us in an emphatic manner that Browning belonged to the great middle class, and that he was a thoroughly typical Englishman of that class. His intellect, we are informed, went upon bewildering voyages, but his soul was at home in the straight road. Of Browning's education, obtained in his own home, the biographer remarks that "if we test it by the amount actually learned we shall think that he was perhaps the most educated man that ever lived." He grew up with the growing fame of Shelley and Keats, in the atmosphere of literary youth, fierce and beautiful, among new poets who believed in a new world. There is not one lot of evidence, says Mr. Chesterton, that he was a man who was intellectually vain, although he was vain of many things—physical health for example. He did not talk cleverly or try to talk cleverly, as that proceeding is understood in literary circles. When he did impress people with mental gymnastics it was mostly in the form of pouring out, with passionate enthusiasm, whole epics written by other people, which is the last thing that the literary egotist would be likely to waste his time over. "Sordello," published in 1840, is, we are told, the most glorious compliment that was ever paid to the average man. "Pippa Passes" is the greatest poem ever written, with the exception of one or two by Walt Whitman, to express the sentiment of the pure love of humanity. "Dramatic Lyrics" represent the arrival of the real Browning of literary history, although he had previously written many admirable poems of a far more ambitious plan—"Parasolus" and "Pippa Passes."

Considerable attention is naturally given Browning's unconventional marriage with Elizabeth Barrett. The "sensational episode"

ment," to use the biographer's phrase, was the talk of the whole literary world. At a supreme crisis of his life he did an unconventional thing, and he lived and died conventional. The two fled to Italy, and hardly more than a faint echo came to them of the domestic earthquake which they left behind them. There Elizabeth Barrett Browning and her husband passed an uneventful happy life, the only incidents being the birth of their son and the death of Browning's mother. Browning loved Italy because to him it was a living nation, the centre and type of the religion and politics of the continent; the ancient and flaming heart of Western history, the very Europe of Europe. Of the disagreement of the two on the question of spiritualism the biographer tells us that Browning did not dislike spiritualism, but spiritualists. Of his love for Mrs. Browning and his solitude for her we have heard many times, but we are glad to have this biographer repeat the fact in his own way. We are told that he had one great requirement of a poet—he was not difficult to please. "The Ring and the Book" is the subject of a chapter in this book, and there is a comparison of Browning and Meredith, which is likely to provoke discussion. Making due allowance for exceptions, which one may take to the positive opinions of the genial biographer, this life of Browning is marked by sincerity and common sense, and it may be recommended to any one seeking a live biography of a delightful man of letters. (New York: The Macmillan Company. Price, 75 cents net.)

The heroine of Mrs. Burton Harrison's novelette is a married woman who has transgressed the moral law and who becomes, after the divorce, an outcast from her accustomed social circles. Mrs. Hatch is the name by which she is known when she returns to the Metropolis with a longing to see her daughter, a longing which only a mother can know. She knows that her husband is married again and she hears that her daughter is about to be married, married, in fact, to a young man who had been very attentive to herself on her trip to the big city. The father is hardened against the woman and for a time she is refused permission to see her own child. At last the father relents and Mrs. Hatch is permitted to see the young lady at a distance. But this does not satisfy her, and later on she goes to the home of her former husband where she encounters the new wife, a woman of high ideas, but of comparatively low birth. There is of course a suggestion that all water on the moon must take the form of ice during the long night hours, and it is now argued that the ice itself, probably not more than a sixth as dense as that of the earth—may be converted into snow by the intense cold. This idea is confirmed by indications of an atmosphere in places that have been lighted by the sun long enough to change the solid air into the gaseous state. A liquefied or solid atmosphere could not be easily detected at our distance, as a liquid ocean would be only six or seven feet deep, but an atmosphere being sufficient to give a level depth of only about thirty-five feet in depth.

A cold-loving earthworm—*Melanchrois tricuspidatus*—has been brought to notice by Russell and Orin. It lives on Mt. St. Elias, Alaska, and by night swarms on the snow of the Malaspina glacier, but when the sun shines burrows under the surface to a depth of eight inches or more.

With an open gauge in a central part of Edinburgh, Dr. W. G. Black last year collected dust and soot indicating a total fall of twenty-four pounds per one hundred square feet. A relation between the character of dreams and the intensity of sleep has been shown by the experiments of N. Vassallo. In profound sleep of the dreams refer to latent recollections of long-past events and matters seemingly having no connection with the present; but the dreams of light slumber are inspired by recent occurrences and excitements, and are sometimes connected with what is transpiring around the sleeper.

Coal workings around Cheadle, in North Staffordshire, England, have been traced back as far as the reign of Richard III. The early mining is explained by local geological conditions, as the coal seams—instead of being hidden under drift as in other parts of England—were brought to the surface through dark streaks turned up by the plow. A late discovery is an old level that was driven at least three hundred years ago for draining a coal tract.

In the new fire-alarm system of Emile Guerin of Brussels, automatic signals are sent to the engine house by wireless telegraphy. The rise of the mercury in a thermometer acts upon a relay, and sets in motion a wheel which makes and breaks the electric circuit by a series of contacts. A series of impulses is thus sent through an induction coil and the usual transmitting apparatus. The receiver at the central station or engine house includes air and earth conductors, coherer, battery and Morse instrument. The same receiver can serve a number of transmitters in different places, and as the contacts on the wheel can be varied, the exact location of the fire can be indicated.

Popular Science.

A special malady of spongefishers is due to an Actinium, a small colloidate that lives in the sponges at depths of eighty to 150 feet. Dr. Skevos Zervos, a Greek physician, states that this parasite is from half an inch to 1 1/2 inches long, and that the poisonous viscous substance secreted by its tentacles produces deep slouching sores on the naked bodies of the divers. The Actinium is also well known as an internal poison, the fishers themselves mixing it with bread or meat to destroy domestic animals. The toxic principle has been lately found by Charles Richet to contain two distinct poisons, one of which—causing intense congestion and hemorrhage—has been named "congestin," while the other—giving rise to violent irritation—is to be known as "thalassin."

Astronomers themselves seem to be tending now to a belief in some connection between the moon and the weather. From statistics from various sources Prof. W. H. Pickering has concluded that thunderstorms are really more numerous in the first half of the lunar month than in the last, liability to the storms being greatest between new moon and first quarter, and least between full moon and last quarter.

In a recent test of the durability of woods stakes two feet long and an inch and a half square were driven into the ground nearly their entire length. At the end of five years, oak, elm, ash, fir and soft mahogany were entirely decayed. Larch and hard pine were decayed on the outside; cedar of Lebanon and hard mahogany were in fairly good condition, but Virginia cedar was as sound and perfect as at first.

Last year eleven British vessels, carrying seventy-eight officers and 781 men, were employed in charting the ocean's bed. An area of 12,000 miles was sounded, thirty-nine dangerous rocks and shoals being discovered, and 194 miles of coast line were charted. Other rocks and shoals reported from various sources numbered 279.

Improvements in telescopes and in photography have been bringing the moon nearer to us each year, until now it is regarded with much the same interest as the ocean depths. W. de Fonville points out that the existence of the cities imagined by Schrotter has been already disproved, and we seem now on the verge of acquiring a start in natural history. At any rate, changes have been noted in the tint of certain regions that suggest the development and disappearance of some kind of vegetation. Kepler suggested that all water on the moon must take the form of ice during the long night hours, and it is now argued that the ice itself, probably not more than a sixth as dense as that of the earth—may be converted into snow by the intense cold. This idea is confirmed by indications of an atmosphere in places that have been lighted by the sun long enough to change the solid air into the gaseous state. A liquefied or solid atmosphere could not be easily detected at our distance, as a liquid ocean would be only six or seven feet deep, but an atmosphere being sufficient to give a level depth of only about thirty-five feet in depth.

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Curious Facts.

Dr. Racovitz contends that whales never sleep. One of his arguments is that individuals will follow a ship for days, which they could not well do while asleep.

A physician, who spent some time in the countries bordering on the Gulf of Mexico, found a curious body of men among the natives called *carrados de calabra*, or the safe from vipers. Having been inoculated with the poison of the serpents they were proof against their venomous bites. The inoculation was made with the venom tooth of a viper and the bulb of a native plant *mano del sapo* (toad's hand). The preventive inoculation has been an old custom among the natives of that region.

The botanist, the real investigator for him- self, will take to you about the thousands of minute stomates on the surface of a leaf. These invisible stomates are really the mouths through which the leaves take in carbonic acid. They

are most abundant on the upper surface of leaves. Each is an oval opening guarded by a pair of lips which open and close according to requirements. They vary from less than one thousand to more than twenty thousand to the square inch of leaf surface.

Those interested in the way of feathered folk are still discussing the question of how high birds fly. Again and again balloons have been sent out to ascertain this, and several German aeronauts have collected valuable information. At present it is believed that the average height of "bird tracks" through the air is about 1200 feet above the earth, though occasionally they have been discovered at an elevation of from six to seven thousand feet.

In Germany 485 piano factories make eighty thousand instruments annually. Half of them, or about \$6,000,000 worth, are sold abroad, principally in England.

An effective way to prevent horses running away has been patented by a Nebraska man, says the American Inventor. "With this device the driver or rider has only to pull a cord lying parallel to the reins and a bellows-like curtain is drawn over both eyes to shut out the sight completely. In this condition the animal can only stand and tremble until the object causing the fright has passed, when the curtain is lifted by releasing the cord and the horse travels on as before. The curtain is housed in a small semi-circular leather casing just above the eyes, and the operating cords are inserted in the bit-rings before passing back with the reins."

Probably the largest car factory in the world is that of the Standard Oil Company at Long Island City, at which seventy thousand five-gallon cars are made from Welsh tin each day for the export kerosene trade. In one day have made twenty-four thousand cans in three days.

Gems of Thought.

There is no riches above a sound body and no joy above the joy of the heart.—Ecclesiastes. He who, in arranging his plans, guides himself, not by what he wishes to do, or does not wish to do, but by what should be done or should not be done, conserves energy, saves time and accumulates strength.

The eye of the master will do more work than both of his hands.—Franklin. Do not begrudge loving deeds and kind words, especially to those who gather with you about the same hearth; and, after all, it is such a little way that we can go together.—Selected.

But remember, if the enjoyments which you permit yourselves are such that the thought of passing time and coming eternally presents itself as an intrusive thought, if you become secularized, excited and artificial; if there is left behind a craving for excitement which can only be slaked by more and more intense excitement; then it is at your own peril that you say, All is left open to me, and permitted.—F. W. Robertson.

When we look around upon the achievements of such souls as LaPlace and Newton, it seems to us that all which is in God is possible for us; that we can make ourselves archangels.—Emerson.

Whatever we do, begin with God.—Matthew Henry.

Let us do our duty, and pray that we may do our duty here, now, today; not in dreamy sweetness, but in actual energy; not in the green oasis of the future, but in the dusty desert of the present; not in the imaginations of elsewhere, but in the realities of now.—F. W. Farrar.

Write your name in kindness, love and mercy on the hearts of those who come in contact with you, and you will never be forgotten.—Chalmers.

As soon as ever you awake in the morning, lift up your heart to God and open it to Him. As much as you possibly can, avoid all thoughts about the world until your morning devotions are over; for you will find that the more the world gives you the soul the first salutation, it will greatly deepen your heart in the morning duties.—John Mason.

If we had no failings ourselves, we should not take so much pleasure in finding out those of others.—Rochefoucauld.

For my part, I should try to secure some part of every day for meditation, above all in the early morning and the open air; but how that time was to be improved, was left to the circumstance and the inspiration of the hour.—L. L. Stevenson.

The oil of insincerity is more to be dreaded than the vinegar of vituperation.

Perhaps the most difficult problem we have to solve in our Christian life is how rightly to correlate the duty of self-development and the duty of self-devotion. When yielding to a strong impulse to self-development we too often forget to devote ourselves, and when coming under the sway of sentiment or of the love of the world we neglect our self-development. But self-devotion is not self-sacrifice; self-waste is not self-devotion. The Great Benefactor of mankind blessed the world not simply by laying down his life, but through the richness of the life he laid down.—Thomas Anderson.

Brilliantes.

"Some mighty task," I said, "I'd do for thee—Some deed heroic, that the world may know, Some sacrifice to stir the stagnant times, And lo! the Lord made plain His will to me; For in my heart I heard this answer grow: 'Wouldst thou best serve me? This is my command: Do thou the duty nearest to thy hand.'"

"Look for the beautiful!" I looked down and saw The road stretched out before me, straight and bleak; Hard roofs, sharp lee, and withered leaves there were,

No beauty. Then, a pool I had not marked, Went suddenly bright, and a pure noise, (Like a fine couplet in a sombre verse.) "Look for the beautiful!"—and in the sky, I found the glory's source—the setting sun Dominant over the encroaching clouds of night; And over in the East, the dawn was seen, Shone fair against the deep mysterious blue. "Look for the beautiful!" Even so my soul.—Pacific Magazine.

His thoughts are as thine own; nor are his ways Other than thine, but by their loftier sense Of beauty infinite and love intense. Work on. One day, beyond all thoughts of praise, A sunny joy will crown thee with its rays; Nor other than thy need, thy recompense.—George MacDonald.

There was a fairy, wise and good, Once on a time, as I've heard say, Who took the life of happiness That foolish folk had thrown away, And wove them in a wondrous loom Till she had made a Robe of Joy, Whose shining folds were never dimmed, And which no time could ever e'er destroy.

Then all the people cried "A hark! Lend us, we pray, this wondrous dress, That we may say that we have won At least a borrowed happiness!" The fairy smiled, "Go, look," she said, "Along your path, and you will find That though a few stray rays I took, Yet plenty still remain behind!"—Frisella Leonard.

Around the man who seeks a noble end Not angels but devils attend.—Emerson.

Nor shun the bowl of foaming milk that feeds The infant, and may serve the senior's needs; Next on the board to Heaven's gift, honey, placed, And, sparing, of Hyblæan nectar taste; Pulses and salads on thy guests bestow—Even in suburban gardens salads grow—And chosen fruits, whatever the times afford. Let roses-red apples crown the rustic board. Last comes the beverage of the Orient shore, Mocha, far off, the fragrant berries bore, Taste the dark stuff with a dainty lip, Dilation waits on pleasure as you sip. Such are my precepts for a diet sage, That leads thee safely to a green old age.—Andrew Lang's Translation from Leo XIII.

1990-1991

MASSACHUSETTS PLOUGHMAN

TELEPHONE NO. 3707 MAIN.

Mr. Clothier has been obviously dressing Mr. Larned down rather than dressing him up.

And there are those of us who can remember when 2.40 was synonymous with pretty fast going!

Who will dare question the Rev. Dr. MacArthur's diagnosis of the relative value of the modern educational powers?

When the Pope sends anybody a White Cap the act is more complimentary than when a number of White Caps elect to make a visit on their own account.

We are very glad that the Dean of the American stage has a new stomach, but our rejoicing is somewhat tempered by seeing the fact announced in the advertising columns.

The mosquito may well smile at the renewed efforts of the Brookline health authorities. The season is nearly over, and "a short life and a merry one" is the mosquito's motto.

It's a good thing to have several professions, but few runaway lovers can expect the good fortune of the Tennessee couple, who discovered that the engineer of their train was also a justice of the peace.

The strike of the Chicago waiters has ended in a fizzle, very much like the "fizz" which they have now resumed the business of opening; unlike the fizz, however, there seems to have been very little exhilaration in it.

A scientific statement of food values—so much meat, so much milk, so much cheese and so on—has again given us an opportunity to let the mind rule the stomach. And yet in this dietary we find no mention of so much breakfast food.

An enterprising person in Philadelphia, as we learn by a special dispatch to a Boston paper, is educating parrots to speak by means of the phonograph. If any means could be devised to ruin a parrot's speaking voice this would seem to be it.

A continental mayor has recently decreed that the owners of dogs shall not permit them to bark without reason. Just how he will differentiate remains to be seen; as our contemporary, Le Courrier des Etats-Unis, remarks, the soul of the dog is full of mystery.

Superintendent Harrison of the Lafayette Indiana jail will probably have little future trouble with mobs. He is having a stand pipe erected with a hose attachment, and proposes to find immunity in the known fact that mobs have very little taste for any kind of water except fire water.

Another sign of the new civilization—which is still a good many years from having arrived—is the concerted action of twenty-four Salem physicians toward the abolition of whistling locomotives during the hour when everybody is supposed to have an inalienable right to be asleep.

One who keeps his ear to the ground might begin to suspect a growing lack of faith in the ultimate value of Mr. Carnegie's library benefactions. And even we have met persons who boldly described the Booklover's Library as an invention for the benefit of those whose love of books stops just short of buying them.

All the world will watch with interest the rise of the Kansas school teacher against the efforts of her school boards to bar matrimonial engagements. A resolution has been adopted: "That a large percentage of our teachers being marriageable, we urge upon all the necessity of vigorous and unceasing rebellion against this attempt to deprive us of our right to court and be courted."

The fact that the Boston postoffice ranks fourth in the country hardly comports with various estimates that have been made of the number of authors resident in Boston. Possibly, however, the majority of Boston manuscripts are so bulky that they go by express; or it may be that the Boston authors get no returned manuscripts and receive their pecuniary results in the form of bullion.

The greatest profit in the ginseng business will probably be made by those who sell seeds and roots at tremendous prices to beginners. In time the business may develop to commercial importance. Its future, however, is uncertain. In any case, as with other specialties, much time, brains and experience will be needed to fully master the situation, and nine out of ten who try will never get back a new dollar for an old one.

Once again the happiness of a modest place in the world is emphasized by the experience of the prominent. Now it is Count Franz Joseph, Maria von Larish-Monish—or is it Larish Monish—who is busily engaged in refusing to pay some \$50,000 demanded by an assorted lot of usurers and marriage brokers. The demands have been accumulating ever since the Count became a brother-in-law of the American people.

The British embargo against cattle from New England ports continues, although strong pressure has been brought to bear through the Government agents and on the part of the shipping interests. Western cattlemen are complaining of the inconvenience of sending cattle by Montreal or New York, but Canada profits by the present state of affairs. Those who have been urging the removal of the restrictions feel somewhat discouraged, and it is feared that present conditions may hold quite a long time.

That Robinson Crusoe's own gun should land eventually in the British Museum seems eminently fitting, but the fact that former owners should have parted with so valuable a historical relic for a paltry \$2.50 should prove a warning to all persons who scorn a knowledge of the literary classics. What makes the rumor seem doubtful is the statement that anything belonging to the original of Defoe's famous islander should have been held at so little value in an Oxford museum. Such a thing surely couldn't have happened on the other side of the Charles.

The meat peddlers were very prompt to follow the extreme prices of provisions last year, but the drop in values was not so easily kept in sight. Some of the dealers,

especially in the country districts, are still taking high prices and charging accordingly, although wholesale prices have been declining, on the average, for a long time. Consumers who have studied our quotations and special market articles will not be likely to submit to extortion of this kind. If the marketman refuses to consider argument, the remedy is to buy somewhere else. There is nothing to prevent a farmer buying at wholesale himself, if he chooses, and thus securing the benefits of the latest market figures. By picking and smoking a part of the purchase, or by selling part to a neighbor, a good-sized purchase can be used to good advantage in cool weather.

The season of the fair begins about this time and will be in full swing all through September and October. Conditions will favor success. Fruit and farm products, although limited in quantity this year, have been mostly of excellent quality and appearance, and plenty can be found for successful exhibition. The supposed new appearance of the root and mouth disease may in some sections interfere with exhibits of live stock, but thus far hindrance from this source is no more than a possibility. The average man is prosperous and will cheerfully spend a dollar and a day at the fair. Farmers and their families have had a hard season's work with some disappointments, but few will care to miss a visit to their favorite exhibition. A high-grade fair cannot prosper without the full support of the best farmers as exhibitors and visitors, and such support should not be withheld.

It is said by an officer of the American Immigration Department that many thousands of the immigrants who went to Canada, owing to the efforts of the Canadian Immigration Department, have left the farming lands that they were offered on easy terms in the Northwest and settled in the United States. The Dominion government paid to the steamship companies for some of these immigrants a bounty of \$5 a head, and it is not encouraging to find the United States preferred to Canada after an apparently fair trial of the advantages of the latter. Of course, what may be Canada's loss is our gain, for foreigners familiar with agriculture are not an undesirable addition to our population.

The turn that affairs has taken, if all stories are true, is a little singular, and shows that there is truth in the saying about the best-laid plans of men going astray. It was thought in the beginning that the inducements offered to settlers by the United States would cause many to go from the United States to establish homesteads, but the present reported developments do not indicate that the Dominion will be overrun by Americans bringing ideas that in time might result in the annexation of Canada to our own country.

The Old Story.

No great national object can be carried through without much verbal opposition and legislative obstruction, and, therefore, it is not surprising that the Panama canal project has been held up in the Colombian Senate. We use the slang phrase advisedly, for there has been disposition displayed all along at Bogota to extort more money from the United States than she has generously offered. The objection to the treaty that it would violate the Colombian Constitution by destroying sovereignty over the canal strip is an absurd one, for in the treaty the legal form of the sovereignty of Colombia has been rigorously preserved. It is more money that the insignificant State wants, and from a country which is believed to be overflowing with riches.

The abandonment of the Panama route is not to be desired, since it furnishes so many advantages in the way of construction already begun, but we are not tied to it, and a waterway across Nicaragua is not an impossibility, though, perhaps, Colombia may be less grasping when it realizes that Panama may succeed if the canal treaty is rejected by a failure of the parliament of Colombia to reverse her unwise decision. Of course, the United States might take a high hand and proceed with the work on the canal, but that would be regarded as an act of usurpation for which she would not like to be held responsible. Colombia is apparently playing a game of bluff, and when she finds she does not hold the winning hand she will, no doubt, accept the liberal proposition already made. She has, to be sure, many clamoring European creditors looking for a speedy settlement of their just claims, but that is not our affair. The United States cannot be squeezed even if Colombia is in embarrassing financial difficulties. A fair offer has been rejected by the Colombian Congress, and it may yet realize that delays are dangerous.

The Vices of American Women.

If the mania for bridge-whist playing has reached, as appears to be the case, the stage where women of birth, breeding and cultivation boast of their winnings in public, it seems to be quite time to turn the searchlight of public criticism upon this vicious development of innocent pleasure in card playing. We ourselves do not number among our acquaintance women who play bridge for money, but the Outlook's Spectator, a thoroughly reliable authority, relates that he overheard the conversation on the car the other day of two young women well dressed and apparently refined, one of whom remarked laughingly, "I've been able to get some lovely things this summer, and I've paid for every one of them by playing bridge." To which the other replied, "I've put my bridge winnings into the market, and once this spring I ran the house on them for two weeks." We have heard of bridge whist and the women gamblers it produces, but we had thought of them as existing mainly in that overhazy social circle where fantastic things, not at all to be taken as indexes of normal feminine life, occur. But that women of the class that a few years ago played "progressive" games for small prizes had now progressed so far as to gamble for food and raiment and to boast of their ill-gotten gains, is news, and shocking news to us.

There is a story, very well authenticated, of a woman who, in a fashionable Southern resort, was introduced to a party of men playing bridge for money by her husband, who played also. They were both young people, and she was as refined and well bred a woman apparently as you would see anywhere. In this hastily assembled party in a public parlor, she played all the evening and won. At the end of the game one of the men paid her over some bills, and she took them quite readily, without even a show of embarrassment. O tempora, O mores! In London it is said that book-selling has declined because of bridge whist. Five hundred packs of cards have been sold this season for every book purchased! And along with this gambling tendency goes, unfortunately, the smoking and drinking evils. It is as if women, having assimilated the business practices of men, were now taking up their social vices also. It is far from un-

common to see women smoking at luncheons of their own sex, and there is often no embarrassment whatever displayed by women who, in the presence of their husbands' friends, accept an after-dinner cigarette. The cocktail-ordering woman is no stranger to our hotels, and not infrequently the lady members of a little dinner company invite the men to drink by desiring stimulants themselves. It is all disgraceful, a state of things that should put cultivated, well-bred women to the blush. Where these evils will end unless women set themselves sternly against their further increase is difficult to see.

The Cattle Disease Again.

The four cases reported from the herd at Wakefield, Mass., on Aug. 23, appear to have been undoubtedly instances of the foot and mouth disease, which has been making so much trouble for cattlemen since last November.

Boston officials of the United States Cattle Bureau declare that the symptoms showed the disease in well-marked and active form, spreading rapidly from the first cow attacked to the other three. No previous cases have occurred so far as known in the herd nor even in the town. Where the disease came from and the extent of the infection are puzzles which the State and Government officials are now trying to solve. If other cases are found the quarantine restrictions will, it is thought, be renewed, at least in the vicinity of the outbreak. This would mean a partial return to the annoying conditions of past few months.

Most serious of all will be the probable effect in prolonging the English embargo against New England cattle exports. It has been quite confidently expected at the bureau headquarters that the English restrictions would be removed about the first of September. Such action may now be delayed for months, retarding somewhat the commercial interests of the whole section and causing further trouble among the cattle-shipping enterprise of the West.

The reappearance of the disease even to the slight extent reported is a most unwelcome surprise alike to officials and cattle owners.

A Worthy Successor.

No worthy successor to Secretary Root in the War Department could be found than Gov. William H. Taft. True, he will be greatly missed in the Philippines, where his services have been of incalculable benefit in settling disputed questions and in bringing order out of chaos in the much distracted archipelago, which came into our hands unexpectedly after a long period of Spanish misrule. His long stay in Manila has been detrimental to his health, and he is deserving of a respite from burdensome cares in a disagreeable climate, even if he has to assume others equally, if not more, important at home.

But as Secretary of War, Governor Taft will still have much to do with the Philippines, and he can direct military matters in our troublesome Pacific possession much more intelligently than if he had no practical experience with their somewhat irrepressible and turbulent inhabitants.

Secretary Root's retirement in January has been long foreshadowed, and he has earned a rest from strenuous official labors. The reforms that he has brought about in the army will be lasting ones, and his successor will carry out his ideas with others that will be suggested when Judge Taft becomes thoroughly familiar with the duties of the war office.

The Pensioning of the Worthy Poor.

The movement, inaugurated by Mrs. Jas. T. Fields about a year ago, looking to the pensioning of Boston's worthy old people, is being watched with great interest. Mrs. Fields' idea was to create a fund that should maintain worthy aged folk in their own homes, and a few hundred dollars have come to her for this purpose. But the need, of course, still remains great. In England, it appears, such a fund as that for which Mrs. Fields has been and is striving, for has attained definite effect, and does exceedingly good work. One Boston lady, who recently had the pleasure of going to visit some of the pensioners in White Chapel with the almoner of the British fund, has given her co-workers here a lively and inspiring account of her experience. "As we walked along," she writes, "my companion told me something of her interest and efforts for the good old people who depended on her for so much. For years, she said, she had visited one old lady in White Chapel, a kind, a handsome and charming old lady, who lived in a little back room. He had been a stationer and well-to-do once. When he first became a pensioner his wife was still alive. They had been married for years and passed through many trials, falling in business, coming down in the world, but keeping together though they had to part with everything. The old wife's death was sudden at last, and the kind almoner went immediately to see what she could do for the widow. She offered to lend him money for the funeral, thinking that the idea of a pauper burial would be repugnant to his feelings, but he positively refused, saying he could never take what it would be impossible for him to repay. 'I was always glad,' the almoner continued, 'he had the pension to keep him out of the Union. He was of just the sensitive, refined nature that would have felt keenly the surroundings of a workhouse ward. It was, he was contented in his little back room, with his independent and his allowance to count upon.' 'I am as well as my age and circumstances permit,' he writes, on one occasion to his friend and confidante, 'nor must I omit to mention to you one little circumstance. By dint of a little extra economy, partially denying myself of my beer and tobacco, I have saved about eighteenpence, and now think I to myself, now I will have a mouthful of fresh air, now I will go out of town, now I will be an aristocrat once more. So I yesterday packed up my now-odd and away I posted down that noted thoroughfare, Petticoat Lane, Aldgate, where I took the train (out of course) to Poplar, and from thence I managed to crawl along to Blackwall Pier, where I enjoyed the fresh breeze from the river and the sight of the boats and steamers running to and fro; and afterwards my pipe, and resting myself for two or three hours I returned home by the same route none the less certainly for my long journey.' It is not all this charmingly told, does it not give one a picture of a wise and calm old age? That pipe of peace by

the riverside, that serene old man, quietly watching the water flow, is like the story of Colonel Newcomb in another station of life. Boston, like London, has many old people, whose last days might be made as happy as were those of old man's, by a small annual pension. To be sure, we have not so large a proportion of excellent and suffering old people as are found in the crowded districts of London, but here also they exist. Unfortunately, too, they are to be found quite out of proportion to the private funds and visitors available. Besides the widows' society, of which there are two, and outside of institutions there is little or nothing for their support. New Zealand assumes that the care of old people is purely a matter of justice, and takes the view that a pension is not a charity but a debt that the state owes its workers. It is there held that "second childhood" is quite as much the care of the state as first childhood. Ultimately, in all probability, the general principle that old age should be protected and cared for will be accepted by all civilized countries, but just how it may be carried out is by no means certain. Meanwhile we have this good work that Mrs. Fields has begun, a work which seems worthy of all possible support. This lady, who is intimately connected with all that is finest in our literary history, is besides one of the most valued of Boston's associated charity workers. She may safely be trusted to have a sane outlook upon life and to be able to discriminate between the old people who would do very well in one of our public institutions, and those who to whom such a life would be far worse than death. It would not be at all difficult, Mrs. Fields assures us, to describe some cases on her own list of Boston old people just as interesting as that of the charming old Londoner, whose story has been outlined. But the danger is great, in our newspaper-reading country, that some poor soul might suffer by recognizing his own case in print. It is wiser, therefore, to refrain and explain only that the fund needs to grow yearly; that a kind company of persons experienced in such affairs will consider with the greatest care each application for pension aid, that a visitor who really loves old people will be found for every recipient from the fund. To commend such an enterprise gives THE BUDGET great pleasure. Not improbably Boston as a municipality might adopt in years to come any adequate scheme for pensioning indigent old people worthy of such aid.

The Marquis of Salisbury.

There have been greater and more brilliant English statesmen than Lord Salisbury, but none more reputable or freer from the tricks of the charlatan. In this he differed from Lord Beaconsfield, who, many sided as he was, had always the odor of humbug about his personality. Salisbury was a plain, blunt man, who, like Maro Antony, spoke right on, mingling a great deal of irony with his comments and reflections on the questions of the day. He had rare good judgment and possessed a deal of the saving virtue of common sense. He knew when to yield gracefully, and when to maintain his opinions with a bold front. His reserve was at times almost impetuous, and he stood upon his dignity more than any other publicist within recent memory. He was an aristocrat of the aristocrats, having little sympathy with the common people or with the advance of liberal opinions, yet a man of upright purpose, whose domestic relations were above reproach. He respected himself, and he respected his family. This may seem uncalled-for praise, but those who are familiar with the undercurrents of life know that this cannot be said of all who have ventured into the muddy waters of politics, and that a shining reputation before the world does not always indicate that its possessor has an undeviating love for the sanctities of home.

Salisbury married for love in early days, when he was a struggling younger son, and worked hard at journalism to secure an adequate income. He was no idler, but one who could face difficulties and bear them like the commoner, who had not a drop of blue blood in his veins. He was of distinguished ancestry, a descendant of the eminent Burleigh, who lived in the "spacious times of great Elizabeth," but he did not shrink from the task entailed upon him by a perhaps too early matrimonial alliance that displeased his stern and exacting father, who was, no doubt, looking for a wealthy bride for the son whom he thought would not be his successor. He did succeed, however, to his father's title, and he wore it worthily, without ostentation, but with a full appreciation of the distinction it conferred.

Salisbury was methodical, looking after his private affairs as clearly as he did those of the nation when he was in office, and he was not apparently troubled in his more mature years by that "eternal lack of peace which vexes public men." He had no great love for politics, and would, no doubt, have preferred the life of an English country gentleman to that of a prime minister, if destiny had not marked out for him a public career, though he evidently believed that the House of Lords was the most important branch of the British government, and that its members were the natural rulers of the people.

Salisbury was the trusted counselor of Queen Victoria, for he was much of her way of thinking in all that concerned her subjects. He did not flatter her after the fashion of Beaconsfield, but he coincided with her in nearly all her views. He was less in sympathy with her son and more liberal successor Edward VII., but he was honest in his views, though they may have been mistaken ones. He belonged to a former generation. May those who follow him in the political positions which he now occupies his sturdy virtues without his narrow outlook on the reformatory spirit of the day.

Year by year our Public Garden grows in beauty, and this year it is to our mind more attractive than ever. Owing to the unusual wet weather last June, the foliage is of a particularly dark, fixed green, which makes a very pleasing background to the countless flowers of every color in the rainbow. While additions of plants and shrubs are being continually made, great pains have been taken this summer to arrange and group the flowers so as to make them especially pleasing to the artistic observer.

Although the fame of this lovely retreat has gone far beyond the confines of our state, its singular beauty and value are, we think, not half appreciated by the people of Boston. Many living within a stone's throw of this delightful breathing-place do not visit it half a dozen times in the whole year.

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Our friend, J. M. Betts of Broken Bow, Neb., sends us the following:

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The Problem of Immigration.

Few things are more interesting than an argument on a live topic to which men of distinction and diverse views contribute feelingly. When, therefore, the Hon. George B. Billings, United States Commissioner of Immigration at the Port of Boston, says with perfect sincerity that immigration regulates itself, and that there is absolutely no reason for alarm at the large increase of foreigners now coming into this port, that the people of other countries apparently know when to come and when to stay away, inasmuch as the records show that in times of industrial and commercial depression the tide sinks to the lowest ebb, only to rise steadily when prosperity returns, and Mr. Prescott F. Hall, a careful special student of the problem, says quite as honestly, "emphatically to many people are now coming over here," one sees more than ever how much depends upon one's point of view.

To be sure, Mr. Hall qualifies his statement by saying that there are too many immigrants of an undesirable sort rather than too many regarded numerically. The present laws, he holds, are not nearly strict enough to keep out the worst elements of an immigrating people. In 1902, he asserts, over seven-tenths of the total immigration was from races which do not rapidly assimilate with the customs and institutions of this country. He adds that much of the recent immigration is not truly spontaneous, but is induced by the steamship agents, who, by holding out glowing promises of success in the land beyond the sea, persuade ignorant peasants to leave their farms—only to fall into the slums of our large cities on their arrival here. As soon as the recent remarkable industrial activity subsides, Mr. Hall believes, there will be frightful suffering, not merely among the recent arrivals, whose standard of living is low, but among their families in decency and comfort in the face of competition with the lowest immigration.

Just here it is worth while to quote a view—very divergent—that of the Rev. Father Ubaldo, rector, of what is perhaps, the most important Italian church in Boston. It is his opinion that we by no means get a sufficient number of immigrants for a country as large as this. Our land feeds four hundred millions of people at the very least, he asserts, and there are not yet one hundred million here. It is his opinion that the danger to this country is by no means from too great a number of immigrants, but from too great a number in our large cities. In this view Mr. Max Mitchell, superintendent of the Federation of Jewish Charities, than whom no man in this city—probably—knows Hebrew needs more sympathetically and ministers to them more sympathetically, agrees. The problem before us is distinctly that of overcrowding, he says. We must not close our ports to the people of the Old World who seek a haven and a home in the land of liberty and plenty, but we must see to it that when they arrive here they are directed out of the city and into the country places where ordinary human industry is rewarded so abundantly.

The inclination of the immigrants themselves to stick closely to the great centres of population must be overcome. If the great crowds of foreigners that inundate these shores every year could be distributed in a sensible and logical way over all that vast unutilized territory in which this nation is so rich, we should never hear any complaint of too much immigration. On the contrary, we should have new cause for gratified wonder every year over the country's progress and wealth. "No better farmers can be found anywhere than among the foreign peoples who seek an asylum in America from native want and persecution, and much more extensive plans should be devised by our public-spirited and philanthropic leaders to provide for these hundreds of thousands of willing hands the opportunity to secure homes in the thinly populated parts of the country." The State of California, we find, is thirty-nine thousand square miles greater than Italy. Yet Italy has thirty-two million of people, and California has scarcely three million. Nor is it from an excess of population or from poverty of soil that Italy today suffers. Taxation is her burden. Again Texas is as large as France, each has about two hundred million square miles. Yet France supports thirty-six million of people, while Texas has probably three million.

Therefore,—to repeat,—the danger to this country is not from too great a number of immigrants, but from too great a number herded in large cities when they would best be distributed in the Western, the South-western and the Pacific-coast States.

Whether the "educational test" for which the Immigration Restriction League is struggling would really be effectual as a bar to objectionable immigration, we are not sure. But the requirement that immigrants, except children and aged persons, be able to read in some language, seems a good one. It has already passed the House of Representatives four times and the Senate three times. In the opinion of many people it should be made a law. Certainly, with the "educational test" established fact, and immigrants directed as a matter of course to settlement in the country regions, the whole vast problem that the coming to our shores of hundreds of thousands of foreign people now presents would be in a fair way to solution.

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Our Homes.

The Workbox.

KNITTED AFGHAN.

This rule is very effective when afghan is finished, and the work goes off quite fast. Procure three pounds of old-rose No. 3 Lion brand, 8-fold pany germanows; one pair of wooden needles, measuring 11 inches round, three pounds lily-white No. 4, 8-fold yarn.

In knitting use two threads at once instead of one. Wind wool in two balls, and knit with an end from each ball. Lily-white same way.

With old-rose cast on a number of stitches divisible by 3, and add 2. Make afghan 14 yards wide, 12 yards long.

1st row—Plain knitting, turn.

2d row—With lily-white knit 1 plain (*), knit 3 together by taking up the stitches as if you were about to put them. Repeat from (*) to end of row, ending with 1 plain; turn.

3d row—One plain (*), make 3 stitches out of 1, by knitting 1, purling 1, knitting 1 all out of the one stitch. Repeat from (*) to end of row, ending with 1 plain; turn.

4th row—With old-rose wool knit 1 plain; turn.

5th row—Like fourth.

Repeat from second to fifth rows until afghan is required length.

EVA M. NILES.

Foods, Digested and Undigested.

In response to a communication urging a diet of dry, hard bread, The Hospital has the following to say about digestible and indigestible foods. The writer of the letter just referred to, Mr. T. Thatchers, states that at the age of sixty-four he had walked forty miles in one day with no more sustenance than two pennyworth of "hard, dry brown-bread crusts", while a holiday in which he ate the normal quantity of "good" food resulted in a nightmare and subsequent depression. Says The Hospital:

"Naturally a man praises the food which agrees with him, but whether or not a crust of bread be as wholesome for others as it is for Mr. Thatchers, there is no doubt that this plea for food that demands some effort in the eating is not untimely in an age when everybody seems to want to have their digestion done for them. For some people, these predigested foods cause an absolute hunger dyspepsia. There is nothing in them to 'stay' the stomach, and the sufferer would probably be better, instead of trying to find something still more digestible, to put himself for a time on a diet of brown bread and haricot beans. Not that either of these is indigestible, though some might think the latter was. It is indeed difficult of digestion, but when digested the food value is high. The really indigestible thing is those which have little food value and make the stomach work for no profit; but if it be worth the effort, a food that is difficult of digestion has a certain merit of its own, in that it exercises the organs of digestion. The gourmet dyspeptic who resents the simple strengthening fare we speak of might console himself with the thought that when his digestion was thus strengthened, he would be able to enjoy the pleasures of the table more than ever before; but if in the process of treatment he grew to enjoy the simplest foods, he would be none the loser."

Packing the Suit Case.

Here is some advice for summer tourists on the art of packing a suit case. It is given by a man who traveled through Europe with two suit cases for his only luggage, and, nevertheless, always looked well groomed.

"Here is my suit case," he says. "It is the ordinary affair except that I have a false lid, which contains receptacles for toilet articles. If I am pressed for room I can leave the lid at home, stuff the toilet articles about the corners of the case, and strap my shirts tightly against the real lid."

"Suppose I am going to any summer resort along the Atlantic coast. In the first place, I shall need an extra sack suit for every-day wear, to alternate with the one I have on."

"Here is an extra suit. I fold the trousers much as you find them on the tables of any clothing store, only I fold the seat inward, so that it will be out of the way."

"There is one thing I want to impress on you right here. Don't pack your trousers with the idea that you can take them out at the end of a long journey and put them right on. You can't do it."

"I made up my mind long ago that the only object in folding a suit in a certain way for packing is to save space, and not to save the appearance of the suit. The first thing I do when I land in a town is to send my extra suit to a tailor and have it pressed. After eighteen years I have found this the only satisfactory way."

"Now lay the trousers flat in the bottom of the case. If you want to carry an extra pair of trousers right on top of these, only have them turned in the opposite direction."

"We come to the waistcoat. Turn it inside out and fold it in half, the crease coming in the middle of the back. Then fold once more, this time with the crease going down the side from under the armhole. Lay it flat on top of the trousers."

"During all these operations you should watch out for little spaces that are not quite filled. Put a handkerchief, a washcloth, a pair of socks, or any such small but necessary article in each of them. Before you know it you will have all your small things cared for without seeming to give them any room at all. Utilize every inch in this way."

"Now for the coat. This is a far more serious proposition, but I believe I have solved it successfully."

"I lay the coat flat on the table and fold the sleeves over at the elbow, so that the cuffs lie over the shoulder. Then I turn up the collar and fold each side of the coat over until the edges meet and the cloth side of the coat is out of sight; the lining only being exposed."

"Once more I fold it over so that it makes a long and narrow bundle. Then a final fold, not vertical this time, but horizontal. Lay it in the case with the rounded side against the side of the case and the collar in the middle. This will leave a deep hole in the other half of the case."

"If you are going to take another suit—say a Tuxedo—put the coat in this hole. That will once more make the surface level, and you can lay your trousers and waistcoat on top."

"If you don't care to take an extra suit, you can get on end of pajamas and underclothing into that hole where the coat would go."

"It is always difficult to pack collars satisfactorily. I do it in this way. I simply put one end of a collar under the coat and leave the other end flapping free, packing things under it as I go along. You see, the

collar takes the curve of the coat, and the coat is solid enough to keep it from being crushed and mussed. By spreading the collar judiciously you can pack a dozen without much trouble."

"During the rest of the packing you will have to be careful of the flapping ends, and pack things under them. When you have finished, lay a shirt over everything and put the collar ends into the collar of the shirt for protection."

"Now you want your bedroom slippers, but don't simply stuff them in with the idea of getting them out of the way. We will use them as bottle protectors. Whichever I go I carry a bottle of witch hazel for shaving and a bottle of tooth wash."

"Put a bottle into each slipper, squeeze them into the sides of the suit case and you have the best bottle protector in the world. Since I have used this method I have used no other, dear doctor."

"You will want an extra pair of shoes. For a summer trip you should have one pair of low shoes and one pair of high. Wear the high on your journey, for with the low take up less room in the grip. Be careful not to pack them so that they can tell anything."

"Now lay your clean negligee shirts over everything, put brushes, combs, toilet articles and such things in the compartments in the lid, and we are about ready to start for the train."

"Let's see what we have managed to get into the case and you will find yourself pretty well provided for a two weeks' trip."

"You have two complete extra suits, extra shoes, socks, underwear, pajamas, shirts, collars, neckties, handkerchiefs, slippers, outing cap or soft hat rolled into a small space, shaving utensils, all the necessities of the toilet safely preserved from harm."—N. Y. Sun.

How Chamoles Skins are Made.

The sheepskin is first washed and the flesh side scraped thoroughly to remove the fleshy fibres; then the wet skins are hung in a warm room for about a week and "sweated." This loosens the wool so that most of it can be pulled out easily. The skins are then soaked in milk of lime to loosen the rest of the wool and to swell the fibres and split them into their constituent fibrils.

After liming, the hair is all removed and the absorbed lime is neutralized with borax or hydrochloric acid, and the skin is split into two thicknesses. The outer or grain side is used for the manufacture of thin, fancy leathers used in bookbinding, etc., while the flesh side is made into wash leather. It is first drenched, then put into stocks and pounded until it is partly dried and the fibrous structure has become loose and open, sawdust generally being employed to facilitate the process.

Fish oil is now rubbed upon the skins in small quantities, as long as the oil is absorbed. The moisture dries out as the oil is absorbed, the skins being hung up occasionally and exposed to the air. When the skins have absorbed enough oil they lose their limy odor and acquire a peculiar mustard-like smell, due to the oxidation of the oil. They are then packed loosely in boxes, where they heat rapidly, and are taken out and exposed to the air to prevent overcooking. During this time they give off much pungent vapor and turn yellow. They are then washed in a warm solution of alkali to remove the excess of fat. The oil removed is liberated from the soapy fluid and sold as "laid oil."

The skins are next bleached in the sun, being moistened occasionally with a solution of potassium permanganate followed by washing with sulphurous acid or sodium peroxide. The leather is then permanently softened and suited for all purposes of toilet or cleansing uses.—Science News.

Delicious Dishes of Vegetables.

"It was necessarily which developed my taste for vegetable dishes," says a woman who is noted for the excellent table she sets and the quality of her cooking, "and it was only after some study that I was able to serve three appetizing meals a day and not have meat on the table at each. We cannot call ourselves vegetarians, but when I found the family health was not what it should be, and the doctor laid the trouble to an overindulgence in flesh food, why, I put my wits to work, and I do not believe there is a family in the city which has a more varied table than ours, and no one would have reason to complain if the three strong men for whom I have to cater say that they are entirely satisfied to have meat only once a day."

"The trouble with most women and the bill of fare they serve to their families is that they wish to make up the menu and do the cooking 'out of their own heads.' It is a common weakness, but providing for a family table for at least ten months in a year is no small task, and it requires the study of receipt books and much thought to make it satisfactory, and so, I am sure, it is in the little variety there will be in a family where the mistress is an intelligent and capable woman. It all comes from carelessness, as I know from my own experience."

"There are many vegetables moderate in price that we do not even think of using. One of these is the German kohlrabi, which is not so different from cauliflower or turnips, but is more delicate than the latter, and makes an agreeable change in vegetables. To cook it: 'Peel, cut in slices, and pour on just enough water to cook. Cook until tender, and when nearly done add salt. Make a cream sauce, season with white pepper, salt, and a little grated nutmeg, if liked, toss them in this sauce, let it boil up once, and serve very hot. They are delicate and delicious.'"

"All the members of the cabbage family are good if properly cooked. They must be boiled just long enough; a little over or under cooking will spoil them. A cabbage should have the outer leaves removed, be left in cold salted water for a time, and examined to see that it is free from insects. It must be put in a large quantity of boiling salted water, with no other ingredient, no soda, and the lid must be kept off and the steam removed from the surface of the water. Brussels sprouts take fifteen minutes to cook, and cabbage and cauliflowers fifteen to twenty-five, according to size. They must be served hot."

The members of the cabbage family can be served in a second-day dish, or immediately baked with cheese if desired. The cabbage is first boiled and may or may not be fried brown after. It is placed in a shallow dish, and butter, the proportion of three ounces to a pound, added with a large cupful of stock of brown sauce and a salt-spoonful each of salt and pepper. It is stirred well and cheese grated liberally over the top and baked for twelve minutes. These are hearty dishes, but men usually like them."

Mushrooms should be used more than they are. There is a false idea that they are a dish for the rich, and that they are

comparatively little known, even with all that has been said of them within the last few years. Most people only know them as they are found served at a restaurant. Little tough, tasteless canned button mushrooms. They can be used in many ways and help to vary variety to the diet."

"An onion dish with cheese is excellent. Large Spanish onions are skinned and boiled until they are quite soft, passed through a sieve, put into a shallow dish with butter, a good quantity of pepper and salt, with a little stock or milk, cheese is grated over them, and they are placed in the oven to bake a good brown."

"There is much waste saved in cooking the pea pods, which give a good stock for the foundation to a soup, and pea croquettes are excellent. In these a little cold ham is used. The peas are beaten to a pulp, mixed with butter, pepper and salt; the minced ham, different savory herbs to taste, made into croquettes, dipped into egg and bread crumbs, and fried in deep fat."

"After more substantial things here is a pretty delicate tomato ice salad, which is delicious. Take a can of tomatoes, or the fresh ones can be used—put them over the fire with half an onion, a slice of green pepper, if convenient, three cloves, two bay leaves, a prig of parsley, a teaspoonful of sugar, and pepper and salt to taste. Cook about ten minutes until the onion is tender, take from the fire and press through a fine sieve to remove the seeds. When it is cold it must be frozen like a water ice in a mould, a melon being a pretty one, and packed in ice and salt. It is served on a new yellow lettuce leaf, and garnished with a small dressing made ready for individual service."

"Many people think they cannot eat green corn, but if it is grated they will feel no unpleasant effects. Mook oysters of corn are delicious. A pint of grated corn or canned corn ground in a mortar, and pressed through a sieve, can be used—mixed with a cup of flour, one egg, two ounces of butter, three tablespoonfuls of milk and salt and pepper to taste. The oysters are dropped from a spoon into the hot fat or frying pan as much in the shape of oysters as possible, and served hot with a garnishing of parsley. Corn pudding and green corn griddle cakes are delicious made of the grated corn. A curry of corn will also make a delicious luncheon dish."—N. Y. Times.

The Crisis.

The woman faints, and these are some of the things that the half-dozen men in the room with her did, says the Baltimore News.

Two of them made a dash for the dining-room to get water, and fell over each other at the door of that apartment.

One hastened to a neighboring drug store for a mixture of vieny and ammonia.

Another appeared suddenly with a glass of whiskey, obtained no one knows where.

In endeavoring to raise the gas two able-bodied and excited masculines put it out and left the party in total darkness for at least a minute, while every one of them fumbled in his pockets for a match.

Four men fanned the invalid with music, handkerchiefs, hats or whatever was to hand.

One held a potpourri jar under her nose under the mistaken impression it would be reviving in its effects, though it wasn't.

Another said, "Here, dear, and tried to wipe her brow with the fan he held, instead of the handkerchief that was in his other hand."

Four of the men called her "little woman," and entreated her to be calm.

Two said, "There, there," and looked at each other and asked, haggardly, if she were quite dead.

One put his arm around her tentatively, not sure that the corpse wouldn't sit up suddenly and smite him for his temerity.

Another called the servant man who had appeared in answer to his urgent call a "blundering idiot" because he didn't understand what was wanted when he was told to "Run for the nearest hat without any delay."

Children like quite an army of men, but in reality it was only six active ones who did all these things. And just as they were in despair a woman came into the room. She took in the situation at a glance, and gave her orders coolly. "Let her lie down," said she, "and stand from around her, so that she may get some air. She'll be all right in a minute. Take away that whiskey and let me have the water. There you are."

And there she was, sitting up and blinking. Yes, it's just as Dr. What's-Her-Name says, men are much more emotional than women.—Exchange.

How to Make Corn Bread.

Corn bread is a food peculiar to the South, but, as made in these days by the ordinary colored cook, it is not the ideal food. It is a mixture of the good old "nanny" was so common to see before us for breakfast, dinner and supper.

Corn bread, to be made properly, should be prepared from good, honest water-ground meal, unbolting. Your fancy meal, bolted, or the "pearl meal," contains but little else than starch. The gluten and phosphates, which sustain life, are taken out in the process of manufacture. Take one cup of good corn meal, sift out the coarsest of the bran and add a cup of boiling water, mix well, and add another cup of corn meal, mix well, and add a third cup of water. Mix well, and add a fourth cup of water. Mix well, and add a fifth cup of water. Mix well, and add a sixth cup of water. Mix well, and add a seventh cup of water. Mix well, and add an eighth cup of water. Mix well, and add a ninth cup of water. Mix well, and add a tenth cup of water. Mix well, and add an eleventh cup of water. Mix well, and add a twelfth cup of water. Mix well, and add a thirteenth cup of water. Mix well, and add a fourteenth cup of water. Mix well, and add a fifteenth cup of water. 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RADWAY'S READY RELIEF FOR PAIN

DYSENTERY, DIARRHOEA, CHOLERA MORBUS.

A half-teaspoon of Radway's Ready Relief in a full tumbler of water repeated as often as the discharges continue, and a fannel saturated with Ready Relief placed over the stomach and bowels, will afford immediate relief and soon effect a cure.

There is not a remedial agent in the world that will cure fever and ague and all other malarious bilious and nervous fevers, aided by RADWAY'S PILLS, so quickly as RADWAY'S READY RELIEF. Sold by druggists.

RADWAY & CO., 55 ELM ST. N. Y.

Poetry.

MAN'S FRIENDS.

Trust no friend, the sages said,
Whom thou hast not proven good;
Those friends who never come,
And you would not think they would.
Many in prosperity,
Are the friends that you may find;
But when trials and sorrows come,
They are often not so kind.

And those whom you least expect
Will help more in sorrow's hour.
Love and sympathy, you'll find,
Given their friendship greater power.
Man has three friends in this world—
What he holds till death draws nigh—
Gold, his friends relied on most,
Is the quickest one to fly.

He enters heaven's gate,
But deserts him at the last;
Friends will follow to the grave,
Then will deem their mission past;
His good deeds, though, never forsake;
To him they will ever cling;
And he learns to wait at last
He had more to bring the King.

They will measure for the crown
That his soul in heaven wears,
And his glory there will share
When he's free from earthly cares.
Then let good deeds ever be
The most constant aim in life,
For they'll purify the soul,
Raise it from life's bitter strife.

MARTHA SHEPARD LIPPINCOTT.
Moretown, N. J.

THE INDIGO-BIRD.

Oh, late to come but long to sing,
My little flock of deep-dyed wing,
I welcome thee this day!
Thou comest with the orchard bloom,
The azure days, the sweet perfume
That fills the breath of May.

A winged gem amid the trees,
A cheery strain from the breeze
From tree-top sifting down;
A leafy nest in covert bough,
When daisies come and brambles blow,
A mate in Quaker brown.

But most I prize, past summer's prime,
When other throats have ceased to chime,
Thy faithful tree-top strain;
No brilliant bursts our ears enthrall—
A prelude with a "dying fall"
That soothes the summer's pain.

Where blackcaps sweeten in the shade,
And elegants a bowler hand made,
Or in the bushy fields,
On breezy slopes where cattle graze,
At noon on dreamy August days,
Thy strain in solace yields.

Oh, bird inured to sun and heat,
And steeped in summer languor sweet,
The tranquil days are thine.
The season's fret and care are o'er,
Its life is lulling on the shore;
Make thy contentment mine!

—John Burroughs, in the Century.

THE DEERTEST HOUSEHOLD.

Up on the hill, 'mid the blossoming trees,
Stands the homestead, bare and tall;
The sunlight gleams on the broken panes,
And shines through the silent hall.
The garden where the children played
Is but a tangled maze,
And the cherry blossoms falling fast
Bring thoughts of other days.

The woodbine climbs to the little porch,
And taps on the dingy door,
It enters the room through the shattered pane,
And trails o'er the dusty floor.
It is twice as old as the broken chair
Where a mother used to rock,
And droops its leaves o'er the hanging door,
And clings to the iron lock.

The roses that bloom in the summer house
Not their drooping heads and say:
"How long it is since the mother sat,
And we watched the children play."
How long since the lovers wandered here
And sat in the gloaming sweet!
How long since the garden echoed gay
With the sound of little feet!

But there's the silence through the garden
And through the orchard sweet;
No sound of happy feet,
And no rush of little feet.
And the roses clustering gently
O'er the window and the door
Listen vainly for the children,
That are coming never more.

Up on the hill, 'mid the blossoming trees,
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—Winifred M. Baldwin, in Springfield Republican.

THE COUNTRY STORE.

Far out beyond the city's lights,
Away from din and roar,
The cricket chirps at night
Beneath the country store.
The dry-goods boxes rickety round
Afford a welcome seat
For weary tillers of the ground
Who have of evenings meet.

A swinging sign of ancient make
And one above the door
Proclaim that William Henry Blake
Is owner of the store.
Here everything, from jeans to tweed,
From silks to gingham bright,
Is spread before the folk who need
From early morn till night.

Tea, sugar, coffee (brown or green),
Molasses, griststones, tar,
Suspenders, peanuts, navy beans
And home-made vinegar;
Pine cones, wash wagers, rakes, false hair,
Paints, rice and looking-glasses,
Sidesaddles, hominy, crockery ware
And seeds for garden grasses.

Lawn mowers, candles, books to read,
Corn planter, household goods,
Tobacco, seed, salt, clover seed,
Kerosene and kilted hoods,
Canned goods, canned fruit and tins,
Straw hats and carpet slippers,
Prunes, buttons, codfish, bridal veils,
Cranberries, clocks and clippers.

Umbrellas, candles, sashes and hats,
Caps, boots and shoes and tins,
Thread, nutmegs, pins and rough on rats
For cash or produce taken.
Bird seed, face powder, matches, files,
Ink, onion sets and more
Are found in heaps and stacks and piles
Within the country store.

—Atlanta Constitution.

Miscellaneous.

A Dream Melody.

"I suppose I've been ill," I wonder what the matter with me?"
Colin Stuart opened his eyes, and, struggling into a sitting posture, saw that he was in the shabby bed-chamber of the old house at the end of the street. He felt like a thief who had robbed a blind man; but his first floor was gone, and new people coming in who wanted an eye for an eye.

Colin was thankful to go. He felt like a thief who had robbed a blind man; but his first floor was gone, and new people coming in who wanted an eye for an eye. He was still only half conscious and painfully weak, but gradually his brain cleared a little, and by bit memory came back to him.

"So she didn't turn me out, after all! She must have looked after me, too, and found money for medicine and food. Her bark was worse than her bite, poor creature! I dare say she's hard pressed enough herself at present, especially if many of her lodgers are as unprofitable as I am."

"How much did I owe her, now, before I was taken ill? How long have I been lying in delirium? And, worst problem of all, what am I to do with myself now I have my senses back again? Life was pretty rough before; it will be impossible now."

Another glance round the room freshened his memory again—the open piano, the loose sheet of torn music carelessly strewn all around. How long the illness had been in duration, no loving hand tended him, only grudging service (given, perchance, as an alternative to an inquiry) had been bestowed on him.

"I remember! I'd reached the end of all things; not one penny left—no work—season fast—couldn't sell music or get it sung, not one solitary engagement through all those awful weeks. Only the clothes I was wearing left not a friend in the whole world I could turn to for help—bread and water for a week—then water without the bread, with the Frenchman's experience to follow; no sooner had I taught the horse to live on one straw a day than the brute sniped me and died!"

"But I didn't die! No, here I am, unfortunately alive. I've been under the waters of fate once, and like other bodies risen to the surface. I shall go down again directly. Mrs. Wilcox thinks she can turn me out without being held up for manslaughter or anything of that kind. Shall I rise the second time through the casual ward or be allowed to die quietly in the gutter? Heaven knows! I don't."

Another long, weary pause, at the end of which the landlady poked her head in at the door, gave a grunt which might either have been satisfaction or disgust on realizing the invalid was still present; then she turned back to the kitchen, emerging therefrom a little later with a basket of very weak soup and a piece of bread, which she set down with a clatter on a small table near the bed with the remark:

"You can feed yourself again now; the time it's wasted every day a-looking after you no money could ever pay for."

"I'm sure I'm very grateful," was the shamed reply. "Have I been ill long?"

"For two weeks," ungraciously, "an me scared to death with all this talk o' smallpox about."

Colin started violently.

"But it can't be that—there is no rash—"

"Good thing for you it wasn't," was the sharp retort. "It's delirium, the doctor says. You've been a-playing that there piano to death, but there ain't enough on those bones to suit me; it's all noise an' no meat in pianos. Never no more music-making take my room just out from under me as soon as ever you can set foot to the ground."

"I must owe you an awful lot," he murmured, brokenly. "I see medicine, and food, and wine, besides the rent; you must be a kind of panopticon fairly disguised."

"Don't you go poking your fun at me," she broke in shrilly. "I'm a poor, hard working, honest woman. Fairly, indeed, the very idea. What you've had you've paid for, or it stands to reason, you'd have gone long ago."

"Paid for? blankly; why, when I was taken ill I was behind with my rent."

"And who'll blame me for paying myself out of the money in your pocket?" he retorted. "There you was a-lying dead (so it looked at first) on the floor, and when the doctor was fetched, he says you're gone, and I'm a good man. I'm a good man, and he says, 'You'd better look amongst his things for his money.' In the meantime, use this, giving me a sovereign. One of the other lodgers sat with you while I run for the medicine, and after we went through your things together."

"Ten pounds there was in two five-pound notes, an' fifteen shillings in silver. I just got the gentleman to sign his name to it being all right, thank heaven, he's here an' can prove, an' in court, that I did it. The three pounds owing for rent, an' paid the doctor back his sovereign, an' used the rest as it was wanted. What's left's in that there box on the table, an' another week's rent due tomorrow."

She was hard, but honest. There was still a remnant of gold among the silver—enough to last, please heaven, until he was strong enough to crawl out again, with the hope of earning a precarious living.

Where the money had come from goodness alone knew! A purse of gold, where not one copper piece had been!

As Colin lay on his lodging-house pillow (hard and rather grimy) unshed tears burned his eyeballs as he thought of that doctor, who, seeing at a glance that he was dying from sheer starvation, had not hesitated to give the "two pence" of the Good Samaritan.

"The mere money I may repay some day," he thought; "but the action never! Whether one pound or fifty at the last day, I will speak—it will have a thousand voices. God will hear them."

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The notes were played through again slowly, tenderly, with wrong chords, with right chords, with one key, with a rich deep voice, hummed them, a girl's clear soprano corrected the man to a curious minor resolution that Colin's shut up had already leaped to—these unknown two—had given him the clue to his dream melody: theirs was the melody of the earth, he would turn it into something that was worthy even of heaven itself.

Down he sat and set feverishly to work and the melody fitted the words, as a glove the hand: "This is the golden rule of life; The struggle and the task are one. The golden rule and the chapter won."

There is the fabled old story of Blazon and badge of bright renown; For the poet's lyre is strong, For the poet's lyre is strong.

He wrote on, and on, and on. Night passed into day, and day nearly into night again before it was finished, and he managed to stagger out and post it himself; then he fainted, and Mrs. Wilcox told him he must leave her house at the end of the week. She couldn't abide invalids, besides which she had a chance of letting her rooms for almost double the money; but her first floor was gone, and new people coming in who wanted an eye for an eye.

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There is the fabled old story of Blazon and badge of bright renown; For the poet's lyre is strong, For the poet's lyre is strong.

Why'd they buy a baby brother When they know I'd good deal rather Have a dog? —Joe Lincoln.

Pa and the Cal.

"It seems to me, Maria," said a kind-hearted city man who lived in the suburbs, "that it is wicked to keep that calf shut up in a close pen like this."

"That's right, John. I have told you several times that the calf should be exercised and have an opportunity to enjoy the sunshine and the fresh air. It is positively sinful to keep animals confined as this calf has been."

"It's a pretty hot day to exercise the calf," replied Maria.

"Don't put off this job on account of the hot weather. You always have some excuse," replied Maria.

At this point of his wife John called out to give the calf a swing. John said he was very sorry and the calf as spring. John said he was very sorry and the calf as spring.

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boys a quart of beer and the youngest children a bottle of beer at supper, at four o'clock, the earl and countess shared a bottle of beer and a bottle of wine; the children also had their allowance. For "livery," which was served in the evening, the parents were supplied with a gallon of beer and a quart of wine and each pair of children with a bottle of beer.

—Old, quaint, almost prehistoric in appearance is "Monticello Bell," a Champaign (Ill.) resident for almost forty years, and whose age, according to her story, is more than a century. She has no family records, and for the proof of her state, she relies largely on historical occurrences of the period between the Revolution and the War of the Civil War.

Washington, D. C., in the year 1780. She says that her great-grandparents on her father's side were Creek Indians, and the strong imprint of the American Indian is remarkably plain, being especially noticeable in the high cheek bones and the lower part of the face.

When a young girl, Auntie Bell states that she went to General Washington's home at Mount Vernon, Va., and was present at the time of the great feast given to the general and his family when he entertained his political and military friends.

Of the origin of Heron's Island nothing is known by science. In the year 63 A. D., the city was devastated by an earthquake, and hardly had it repaired the immense damages done when, sixteen years later, in a few minutes it was buried beneath six feet of ashes, mud and lava, and the city was never seen again.

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The Horse.

The Demand for Horses.

The horses two years old and upward in the United States June 1, 1900, numbered 18,300,441. These were the horses of working age. Taking the colts one and under two years old as the best measure of the number of young horses required to meet the annual demand for horses for use on farms and elsewhere, the conclusion is reached that the number required was approximately 1,478,149.

Assuming that this number of colts is sufficient to offset the losses by disease, old age, etc., the figures, taken in connection with the number of horses of working age, indicate an average life for horses on farms and elsewhere of approximately fifteen years, or an effective life of thirteen years.

The working life of a horse is probably longer on farms than in cities. To supply the demand for horses in cities in the United States, exclusive of providing horses for exportation, animals must be bred to the number of about three hundred thousand annually. To supply the demand for horses on farms and elsewhere, exclusive of cities, 1,200,000 more must be bred annually. The demand from cities and towns is, therefore, one-fifth of the total for the United States. These figures will aid greatly in measuring the force of the influence that was active for a series of years prior to 1885 in advancing the average price of horses, and in determining the causes of the depression in values between 1885 and 1896, and of the steady advance in prices since the last-named year.

The New Pacing Record.

Dan Patch broke the world's record for paces at Brighton Beach, N. Y., Aug. 19, by pacing a mile in 1.59. It was a magnificent performance and seemed an impossibility, the wind and track considered. There was a stiff breeze blowing, which struck the horse fairly in the face. The track was a little slow, but the effect of the wind was discounted by sending a runner in front while the second runner galloped alongside. In view of the adverse conditions the announcement was made that he would go against the track record of 2.00, but would also try to beat the champion record of 1.59, held since 1898 by Star Pointer. When the unbeaten pacer—Dan Patch never lost a race—appeared on the track he was loudly cheered, and after a few preliminary warm-ups he got the word. With a swift, frictionless stride he shot from the wire and seemed to be determined to push his nose into the flying sulky in front of him, which the thoroughbred in the shafts was steadily pulling ahead. On swept the famous pacer to the quarter in 23 seconds, and when the half-mile pole was flashed past in 1.33 a great volume of cheers went from the vast crowd. Then came the difficult turn, and the slowest quarter of the mile ensued, the three-quarters being done in 1.29. But down the stretch, as swift and steady as a locomotive, he came, and as he shot under the wire the watches stopped at 1.59. The new champion was not at all distressed, and looked as if he would be able before the season is over to beat his own record. The betting was even money either for or against his beating the record.

Commissioner Willing of the New York Department of Agriculture has announced the closing of a contract to have Major Delmar trot against the world's record at the State fair at Syracuse on Wednesday, Sept. 9. In case of bad weather, the test will come on the following fair day.

My father used to tell me when I was a boy, that a good cleaning was as good for a horse as four quarts of oats. I did not believe it then as fully as now. There is no question but a well-cared horse does better. Also, there is a good deal in proper feeding. Some horses at least would eat themselves poor, if hay was kept constantly before them. I want them to have a reasonable feed that they will eat right up, as a rule, and then go without till another feeding time comes around. The only exception to this is when the horses are very hard at work, then we let them have about all the hay they will eat during the night. But they do not eat all the time then, but rather eat for a time and then lie down, and towards morning get up and eat some more. In the morning and at noon they are only moderately fed, and always so fed when idle or doing only light work. A horse can eat grass in the field constantly, or all it wants during the day and night and do well. But grass is a natural and easily digested food. Hay is not as easily digested, not even dried grass. The horse does not know this. The owner should exercise judgment for him.—T. B. Terry.

The Hop Harvest.

Hops are ripe when the seeds are hard and of a purple color. After this they turn brown, seeds drop out and there is great loss in quality and weight. Commence picking when the seeds begin to harden and turn in color, do not hurry too fast at this stage, for while the hops are rather green the kilns must not be filled more than ten or twelve inches deep. When the hops are fully ripe, on a good kiln they can be dried from sixteen to twenty-four inches deep, and two kilns full can be dried in a day.

With light willow baskets, holding three or four bushels, commence at the ripiest part of the yard. A large girl or man can loosen wire or string from the stakes, letting it drop until held by the vines.

Pick clean, putting the fingers through between the hops in the bunch, instead of around it. No large leaves and no bunches of more than three hops should be allowed in the basket and as few small leaves as possible. The owner should empty the baskets into sacks and see that all are well picked.

Sacks for carrying the hops to kiln hold ten to twelve bushels without packing; if pressed they will soon heat and turn black. Bags should never be full of hops over night. The vines are left on the strings or wire until killed by the frost so as to mature the root for another crop. Then it is best to take them down and burn them. In this way the eggs of the plant lice are mostly destroyed.

The kiln should be proportioned to the amount of hops to be dried. It may be divided into four rooms. Stove room where fire is made is sixteen feet high, with stone or brick walls and no floor; at the bottom are six air holes, one by three feet, with doors to close them when necessary. The stoves are large enough to take in three feet wood. The pipes are carried one or two across the room near the level of the top of the stove and then go into a chimney on the outside of the building. The pipe may be run several feet from the building and turned up like the smoke stack of a steam

boiler to make a good draft. There is a door from stove room into the baling room, with a light of glass, so man attending the drying may see the state of the fire.

The drying room is over the stove room. Joists may be laid across the top of the stove room and wooden slats one by two inches laid on them and 2 1/2 inches apart. On this is laid a loosely woven carpet with spaces one-sixteenth of an inch between the threads, allowing hot air to pass through it freely, or better, use no joists and put telegraph wires three or four inches apart in place of slats, stretching wires tight by a nut on the end. Hops are put on the carpet from a movable plank supported from rafters by wire rods, while drying the plank is turned on edge.

In about ten hours when hops are dry or when one-half the stems will break on bending them, the carpet is rolled off by a shaft in the stove room, so all the hops are taken off in less than five minutes, and the carpet is back ready for a new charge without loss of heat nor letting the fire go down. No sweeping is needed with this kiln, it does any one step on the carpet. The roof should be high to have the ventilator as high as possible and make a better draft for letting moist air from hops off. A slat ventilator can be used.

The storeroom is next the drying room, but the floor is several feet lower, three to eight feet lower than the carpet, so there will be plenty of room to store hops in bulk until they are ready to press. This room should be kept dark while hops are in it, as they will turn brown if exposed to the light. Have bins in this room to put damaged hops in. Under the storeroom is the baling room with a tight floor; here the hops are baled, hop press and tools stored. The temperature is kept as regular as possible, about 140°. When the hops are drying bleach by burning sulphur on coals. If free from rust or mould one pound of sulphur is enough for a kiln; when very rusty from two to five pounds are used. If the hops get too dry close air holes and burn a quart of salt on a pan of coals. This will toughen them.

The baling is done four or five weeks later; a rainy time is better as the hops handle best then. Baling cloth is made on purpose for hops; use common bent sail needles. Cut the cloth for the bottom piece one yard longer at the bottom of the press, the upper one six inches shorter. Have side boards to fit in from the top of the press to a trap door in the floor of the storeroom and a wooden box there of the same size to shovel them into. The side boards come out when the hops are below them.

Fill the corners of the bale full so as to make a square handsome package. Bales weigh from 150 to 240 pounds, according as they are pressed and how well seeded. Always sell the first year. At two years old hops are worth about one-half price, and are almost worthless at four or five years.

An acre will yield from six hundred to two thousand pounds of hops. The cost of raising is from four to six cents a pound. Every fall the yard should have two forkfuls of coarse manure and ashes on the top of the hills, partly as a protection to the vines. I. A. L.

Dukes County, Mass.

A Dairyman's Good Income.

Dairying in the Northwest has made wonderful progress during the past dozen years. A more prosperous and enterprising set of farmers than who attended the meeting of the Guernsey Breeders Association at Athens, Wis., would be hard to find anywhere. What was apparently a typical experience of a successful Wisconsin dairyman was related on that occasion by H. D. Griswold of West Salem, Wis.:

"Choose a herd sire that has a mother and a grandmother and as many more relations as possible that were good milk and butter producers," advised Mr. Griswold. "Get the very best you can. Then get a scale and a Babcock test and know what each cow is doing. Cull out the poor ones and keep the best always. Keep up that practice with your helpers. You cannot buy good cows; there is only one way to get them, and that is to raise them. Then comes good feed and plenty of it, warm and well-lighted stable and constant, careful care."

"Now to illustrate along this line I will give you a little of my own experience. In 1889 I bought my first Guernsey sire. I had then one Holstein cow, one Jersey and three or four Shorthorns. I find by my books that my total receipts for butter that year were \$138.88. In 1901 I got a Babcock tester, the first one that had ever come to our town. I found that year that my cows were making 365 pounds of butter each; I then had nine. I increased the number till in 1902 I had twenty-one cows. I have increased the average production per cow to 424 pounds each. I have increased my receipts from \$138.88 in 1889 to \$1937.43 in 1902. I now have twenty-five cows, and in the month of May just passed we got 5700 pounds of cream testing twenty per cent butter fat, with no other feed than grass and a little ensilage. These twenty-five cows are all grade Guernseys but five. I have three Jerseys and two full-blood Guernsey heifers. All but three were raised by myself on the farm and have never been to the place. Six of the twenty-five are two-year-old heifers."

"I tell you this not to boast, but to let you know what we are doing today instead of giving you some has-been tale. We have the same little fifty-acre farm that we had in 1889, but we have built onto the barn four

times, have built two silos, and the farm is increasing in productivity. Over ten years. True, but you have to work at something, and dairying is no harder than other work. The land must be kept up with some kind of stock, and what can you do better? Did you ever think that an income of \$2000 on a little farm in the country is better than twice that in the city? Then the boys are interested in good stock, as they cannot be in scrub stock. And this daily association with these dumb animals makes a man better. He has to anticipate their wants; he has to take lots of steps and do countless little things for their welfare and comfort, and these daily duties make him more thoughtful of others, and he becomes a better husband and father and citizen."



A PROFITABLE TOMATO CROP.
See descriptive article.

Profit in Early Tomatoes.

Growing and marketing tomatoes is an important branch of farming on the garden and truck farms about Providence. The soil of the greater part of the county is suitable for their culture, and in some portions exceptionally early ones are produced. The soil is in a large part of the towns bordering upon the city a light sandy loam, such as is just right for early forcing crops, and this helps the tomato grower.

Plants started in hotbeds will bear as early as the middle of July in a good season, and at that time fabulous prices are received for the fruit. Sometimes, as during the present season, the early figure is as high as \$5 a bushel, and the tomatoes that are raised early are not of surprisingly good quality. Two to \$3 is a common price for early fruit, and it will drop sometimes in two weeks to about \$1. This year the season was backward and tomatoes were late.

A great thing in marketing tomatoes is neatness. They must be carefully wiped and packed in boxes, and neatness must be observed in all their care. The picture was taken on the farm of William R. Fenner in the town of Cranston. Mr. Fenner is not a very large tomato grower, but he raises tomatoes of a very good quality. W. E. STONE.

Providence County, R. I.

Notes from Washington, D. C.

It is believed that the alfalfa plant is gaining considerable acreage in the eastern or rain-belt section of the United States. Of the arid region it is recognized as the forage crop. The Eastern farmer who experiments with alfalfa growing is likely to have some trouble, and should make a little study of its habits before giving it up in disgust, as those who have been measurably successful claim that the alfalfa will in time come to be considered the savior of worn-out land. Its growth will probably be limited, however, to soils having a gravelly or otherwise loose and easily penetrable subsoil, for the roots of the alfalfa naturally go down ten or twelve feet. This very fact would hold out hope to worn-out lands, that is, where the subsoil has been worn out, for these roots, extending to great depth, would bring up to the surface large quantities of fertility. The most likely difficulty, it is said by scientific grass men, is the question of soil inoculation. The alfalfa, like other legumes, draws its nitrogen from the air through root tubercles produced by minute bacteria, and where the seed is sown in ground free from any of these organisms, unless artificial inoculation is undertaken, the plants can get no nitrogen from the air and their growth amounts to nothing. On the other hand, with these bacteria supplied to the soil, alfalfa in the Eastern States, here in the District of Columbia for instance, will grow more rankly than clover and will produce three crops a season averaging a ton each. This season being a wet one a twelve-acre plot of alfalfa at the National Soldiers' Home just outside of Washington will aggregate considerably more than three tons per acre. And alfalfa makes a better hay than either timothy or clover, and according to the farm superintendent at the Soldiers' Home, far better ensilage.

The question of soil inoculation for alfalfa, or for any other new legume that is desired to introduce in any section, is not a serious one. If a farmer wishes, for instance, to plant a patch of alfalfa and can get a cart load of dirt from some adjacent alfalfa field, all that he has to do is to evenly distribute it over his field. If he can only get a small amount of dirt he should mix it carefully with a larger amount making a pile of several wagon loads, thoroughly mixed, which can then be spread over the field to be planted. A regular machine manure spreader is the best agent for this work. The bacteria multiply very rapidly. If he has no means of getting hold of inoculated soil himself, the Department of Agriculture will furnish him dried "cultures," with accompanying chemicals and directions, all put up in a little box and sent free. The "cultures" and chemicals are then liberated in water and sprayed and mixed into dirt or manure, which can be spread upon the field. The department is doing this sort of work with various legumes. Cultures can be obtained for alfalfa, soy beans, velvet beans and a number of other legumes.

One of the beauties of alfalfa growing lies in the fact that when once established it requires no cultivation. Fields of alfalfa in the West under irrigation have stood as originally planted for twenty and thirty years, with from three to six cuttings every season. Of course, to keep an alfalfa meadow yielding heavily it will have to be well topdressed and fertilized. In the West the salts and sediment carried by the irrigation water act as a fertilizer.

The annual report of the Bureau of Animal Industry, now being compiled, will con-

tain a goodly number of instructive articles and reports. Dr. Salmon, the chief of the bureau, will contribute an article on animal food and animal diseases, and also a discussion of the foot and mouth disease, which gave American cattle growers considerable of a scare this spring, but which is now considered stamped out. The editor of the bureau, George F. Thompson, will present some facts regarding contagious diseases of animals in foreign countries and the necessity of a strict watch over our importations. He will also have an article on the live stock work of the various experiment stations, also the distribution and magnitude of the American poultry and egg industry, as well as the facts regarding the introduction into this country of Welsh mountain sheep and their possibilities in our rugged districts. The history of the American saddle horse by Gen. John B. Castleman of Kentucky has already been reviewed in this journal. A joint article by Messrs. Soule and Barnes on protein in cottonseed meal, cow-peas hay and wheat bran will be something of interest to every farmer who feeds even a single animal. Other articles and comments include the work of the department against sheep scab, the feeding of steers, the water in creamery butter, by Major Alvord, feeding with a view to producing milk rich in cream and various remarks and statistics on oleomargarine, imports and exports of animals and animal products, wool production in the country, rules and regulations of the bureau, etc. The report will not be ready for distribution for several months, probably not before the first of the year.

Commenting upon the necessity for a foundation of good blood in the improvement of stock, the distinguished writer, John H. Wallace, says in an unpublished letter in the possession of the Department of Agriculture: "When I commenced to think and write about the horse fifty years ago, like all other beginners of that day, I was as wild as a hawk. I was terribly afflicted with the parrot cry of that age, that the way to improve the horse or any other domestic animal was to 'breed up,' and I never got clear of my affliction till I sat down to the task of great collections of facts. It did not take me long to learn that there were breeding up was a delusion and a humbug, and that the true way to breed was to go to the horse that possessed the qualities and could do what I wanted my colt to possess and do."

"In other words, adopt the simple formula that 'like begets like.' In looking back over the acts of a long life, I think that if I have done anything that may live after me, it is the promulgation and support of this great central truth as applied to breeding horses. It met with much and bitter opposition for a long time, but it has now become the law of the land."

The inadvisability of using sewage for fertilizer and watering crops—at least certain crops—is shown by a report of German and French tests noted by the Department of Agriculture. Not only is there a natural aversion to the use of such materials as night soil and sewage for growing vegetables to be consumed raw, but, on the authority of Wurtz and Bourges, their use is positively dangerous. Recent experiments by these French bacteriologists show that diseased germs are carried in such material and may be taken up and preserved in the tissues of vegetables. In one instance water cress, head lettuce and radish seed were sown in pots and the soil watered with diluted sputum that had been saved up for forty days from a tuberculous patient. After a certain period pieces of the leaves of the vegetables grown were used to inoculate guinea pigs. As a result eighteen of the thirty inoculated pigs developed tuberculosis. Like experiments were also made with typhoid fever bacilli, and in every case, without exception, the typhoid bacillus was easily found in the leaves of the vegetables.

The gospel of deep plowing and frequent cultivation, which has been preached for a number of years with increasing vehemence in the semi-arid regions of the West—western Kansas and western Nebraska—is bearing rich fruit, according to C. E. Wantland, land agent for the Union Pacific Railroad, who was in Washington recently. Mr. Wantland says that the very sections of western Kansas which were originally colonized in wet years, and towns, churches and schoolhouses built, later to be abandoned and revert to the desert because of a lack of moisture, have, under modern methods of deep and frequent culture, and through the aid of drought-resisting crops, such as kafir corn, become again settled up and are now making good crops for their owners. "Campbell's soil culture" is but a slight variation of what probably every agricultural editor in the country has during the memory of the present generation more or less strenuously advocated—deep plowing of the soil and constant stirring of its surface immediately following the planting of the crop, for the purpose of producing a close fitting "blanket" of minute soil particles, thus preventing the moisture from rising and evaporating and conserving it for the roots of the plants.

GUY E. MITCHELL.

We notice in a contemporary an editorial hinting that the public does not rely the presence of its chief executive's name in connection with so many unusual actions—such, for example, as getting up early in the morning to go horseback riding. Not far from this editorial appears an account of a private wood-chopping, of no intrinsic interest to the public, and certainly none of its business—that appears at first glance to substantiate the editorial. But who was responsible for the article? A calculation of possibilities leads one to believe that it must have been the editor.

Belgian hare fanciers will make a big display at the world's fair at St. Louis. Many American fanciers have already arranged for exhibits, and many parties from England and other European countries have announced their intention of exhibiting. This exhibit will come under the live stock department. Large displays of fancy rabbits, poultry, pet stock and domestic animals will be made.

AN ILLUSTRATED BOOKLET.

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The beautiful Hoosac Country and Deerfield Valley has been delightfully described by the Boston & Maine Railroad, but not until this year has the \$5 excursion trip on Oct. 1 via this route and the Hudson River steamers been at all detailed. This year a charming little booklet which carries the reader from Boston to Albany and then down the river to New York, giving an interesting sketch of each passing point of interest and unfolding the scenic beauties of this region, has been published. It contains several beautiful illustrations of scenes in the Deerfield Valley and Hoosac Mountains and along the shores of the Hudson. It is invaluable as a guide to the intending excursionists and is an interesting booklet too for every one. It will be mailed free by the General Passenger Department, Boston & Maine Railroad, Boston, to any address.

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